

NSCF 80-400/220/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		
12	Operating speed	1470 rpm	Stages	1
13	Suction nozzle	DN100 / PN10/16 / EN1092-2	Impeller Ø	Max. mm 418
14	Discharge nozzle	DN80 / PN10/16 / EN1092-2		designed mm 356
15	Max. casing pressure	kPa	Flow	Min. mm 338
16	Max. working pressure	kPa 430		Nominal m³/h
17	Impeller type	Radial impeller	Head	Max- m³/h 179
18	Head H(Q=0)	m 44		Min- m³/h 20.6
19	Max. shaft power	kW 21.4	Shaft power	Nominal m
20	Pump weight	kg 154		at Qmax m 24.8
21	Total weight	kg 403.2	Efficiency	at Qmin m 44
			NPSH 3%	

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 180 L B3 22 kW		Shaft diameter	Pump 42 mm	Motor 48 mm
45	Rated power	22 kW	Rated current	42.2 A	Frame size	110
46	Nominal speed	1470 rpm	Rated voltage	400 V	Spacer length	mm 4
47	Frame size	180 L	Service factor	1	Weight	kg 3.3
48	Weight	kg 141.0	Degree of protection	IP55	Coupling protection	GR.COUPLGUARD ES42-230-16 A4 1.7 kg

Base plate

49	Name	BASEFRAME_NSC80-4_C00				
50	Weight	kg 103.2	Remarks			

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Performance curve

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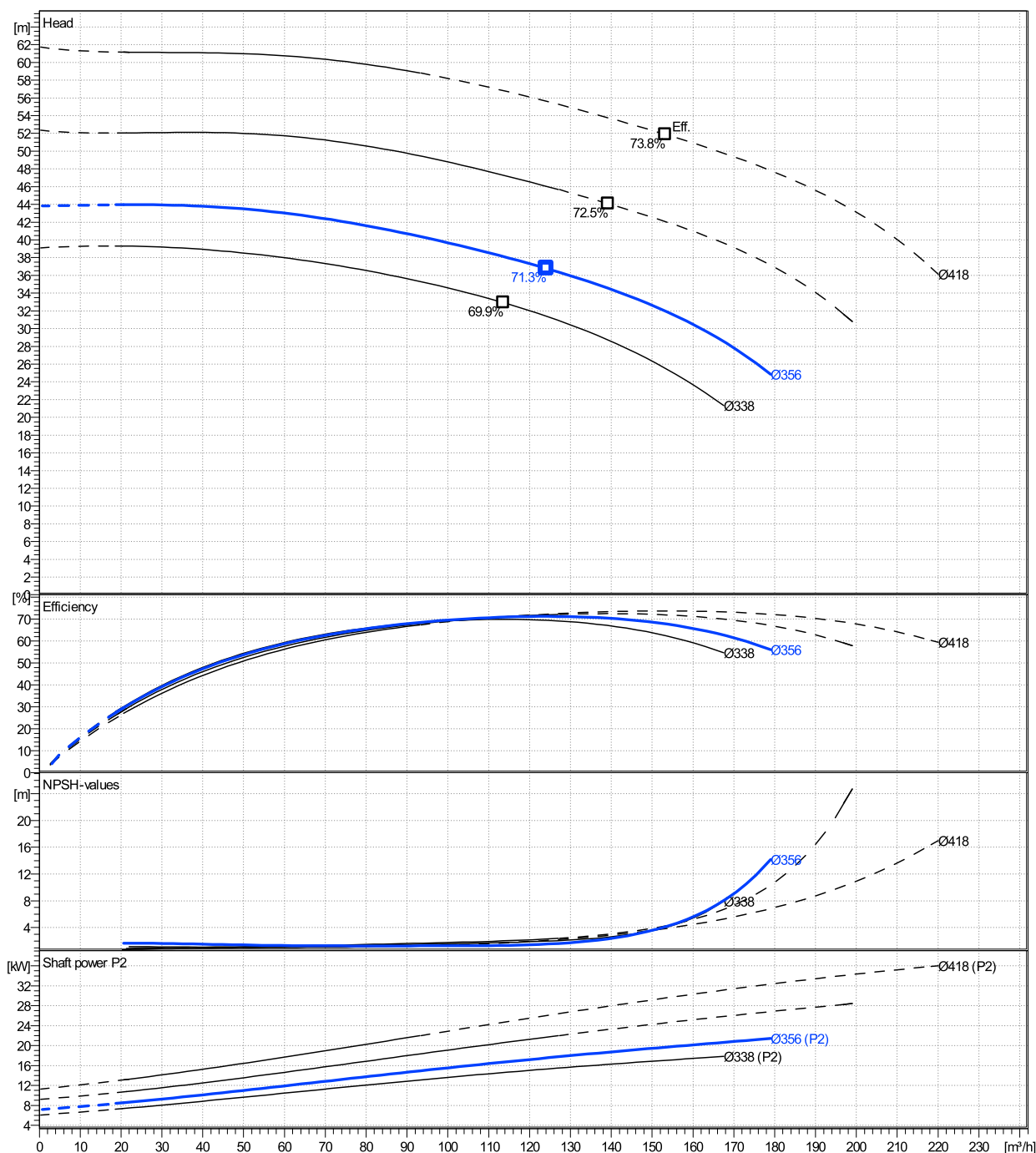
	Ø mm	Pump capacity			Pump head		Shaft power P2			Frequency		Hz
		Operating range Min. m³/h	Max. m³/h	η Max. m³/h	H(Q=0) m	η Max. m	P2(Q=0) kW	Max. kW	η Max. kW	Operating speed rpm		
actual	356	20.6	179	124	43.8	36.8		21.4	17.5	Nominal flow	m³/h	0
Min.	0	/	/	114	39.1	32.9		/	14.6	Nominal head	m	0
Max.	418	/	/	153	61.7	51.9		/	29.6	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: >=0,70 - according to Ecodesign Directive 2009/125/EC and Regulation (EU) No.547/2012



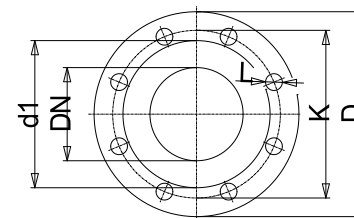
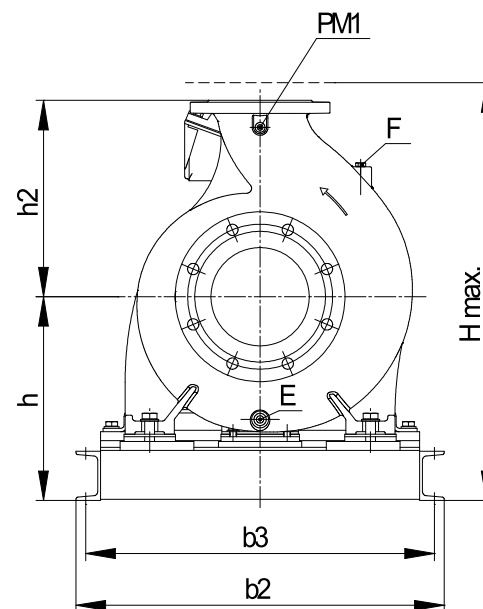
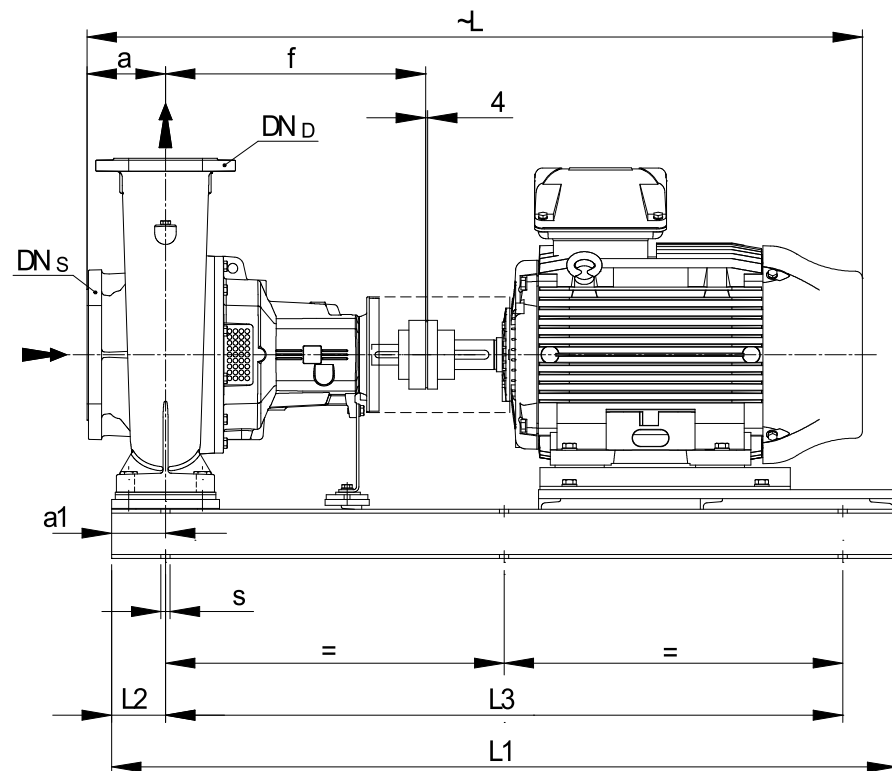
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Dimensions

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Frame mounted
Standard coupling
3MAS 180 L B3 22 kW

Electrical and dimensional data refer to IE3 motor



Value C, D may vary from Standard

Dimensions [mm]

a	125
a1	110
b2	670
b3	630
CTO	0
DNd	80
DNs	100
E	3/8"
F	3/8"
f	530
Guard	224
h	400
h2	355
Hmax	755
L	1360
L1	1430
L2	110
L3	1210
PM1	1/4"
s	6xØ19
Trim	0
Volumen	0.68796

Weight

Total weight	403.2 kg
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Connections

Suction nozzle		Discharge nozzle	
DN100		DN80	
PN10/16		PN10/16	
EN1092-2		EN1092-2	
C	24	C	22
D	230	D	200
d1	157	d1	132
K	180	K	160
L	19	L	19
z	8	z	8

Dimensions and weight without obligation

Project Xylect-20101285
Block NSCF 80-400/370/L45VCC4

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