Technical Data

Pump Name 3LPF 80-160/L

Customer	Date 10.06.2024	Company	
Contact	Item no.	Issued by	
Phone	Project	Phone	
E-mail	Project ID	E-mail	

Requested data

1	Pump type	CENTRIFUGAL PUMPS	Fluid		Water
2	Number of pumps / Reserve	1 / 0	Liquid temperature	°C	20
3	Flow m³/h		Kin. viscosity	cSt	1.005
4	Head m		Vapour pressure	kPa	2.34
5	Geodetic head m		PH value		
6	Inlet pressure (pin) kPa	0	Density	kg/m³	998.3
7	Available system NPSH		Solids	Weight %	0
8	Ambient temperature °C	20			

Pump

9	Pump Name	3LPF 80-160/L	Frequency		Hz	50
10	Design	CENTRIFUGAL PUMPS	Installation type			STANDARD
11	Manufacturer	EBARA	Impeller Diameter	Max.	mm	174
12	Speed rpm	2900		Designed	mm	174
13	No. of Stage	1		Min.	mm	174
14	Connection Suction side	DIN 2532	Flow	Operating	m³/h	
15	Connection Discharge side	DIN 2532		Max-	m³/h	240
16	Max Working Pressure kPa	1000		Min-	m³/h	78
17	Shut-off head kPa	391.58	Head	Operating	m	
18	Total weight kg	See the table of "Dimensions".		- (Qmax.)	m	20.0
19	Shaft power kW			- (Qmin.)	m	38.9
20			Max. Shaft Power at max. impeller		kW	18.68
21	Required pump NPSH m		Efficiency		%	

Materials

22	Impeller	AISI 316		
23	Casing	AISI 316		
24	Shaft	AISI 316L		
25				
26				
27				

Motor

28	Manufacturer	without motor	Insulation class		
29	Type	without motor 3	Phases		
30	Specific design	without motor / 50 Hz / Pole pairs 1	Frame size		
31	Rated power kW		Weight	kg	
32	Number of poles	2	Electric voltage	V	
33	Speed rpm		Electric current	A	
34	Degree of protection				
35					

Remarks

EBARA

Performance Curve

Pump Name 3LPF 80-160/L

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Requested data

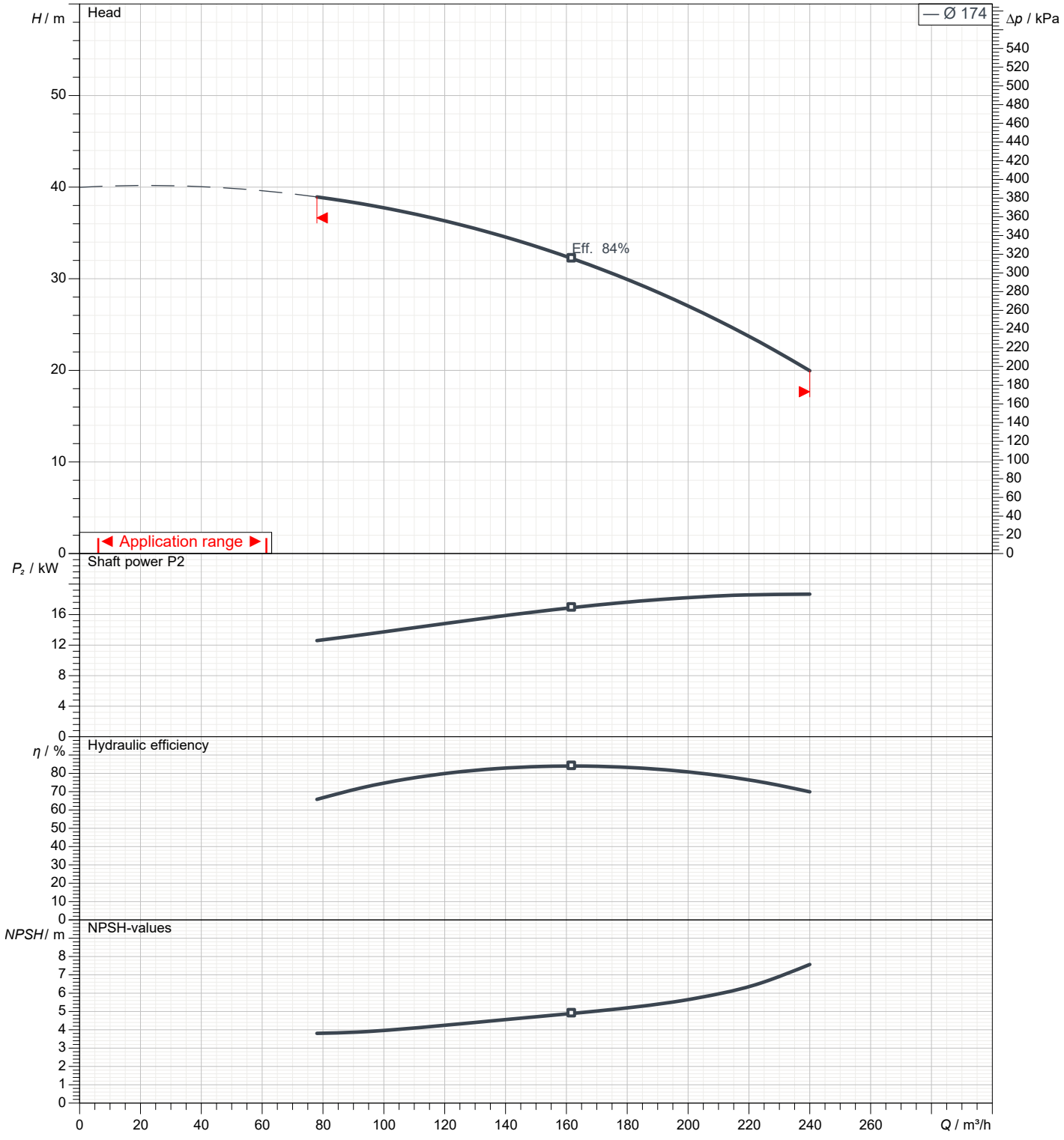
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

Pump

Operating flow	m³/h		Frequency	Hz	50
Operating head	m		Number of poles		2
Impeller diameter designed	mm	174	Speed	rpm	2900

Test standard: ISO 9906:2012 - Grade3B

Water; 20°C; 998.3kg/m³; 1cSt



Dimensions

Pump Name 3LPF 80-160/L

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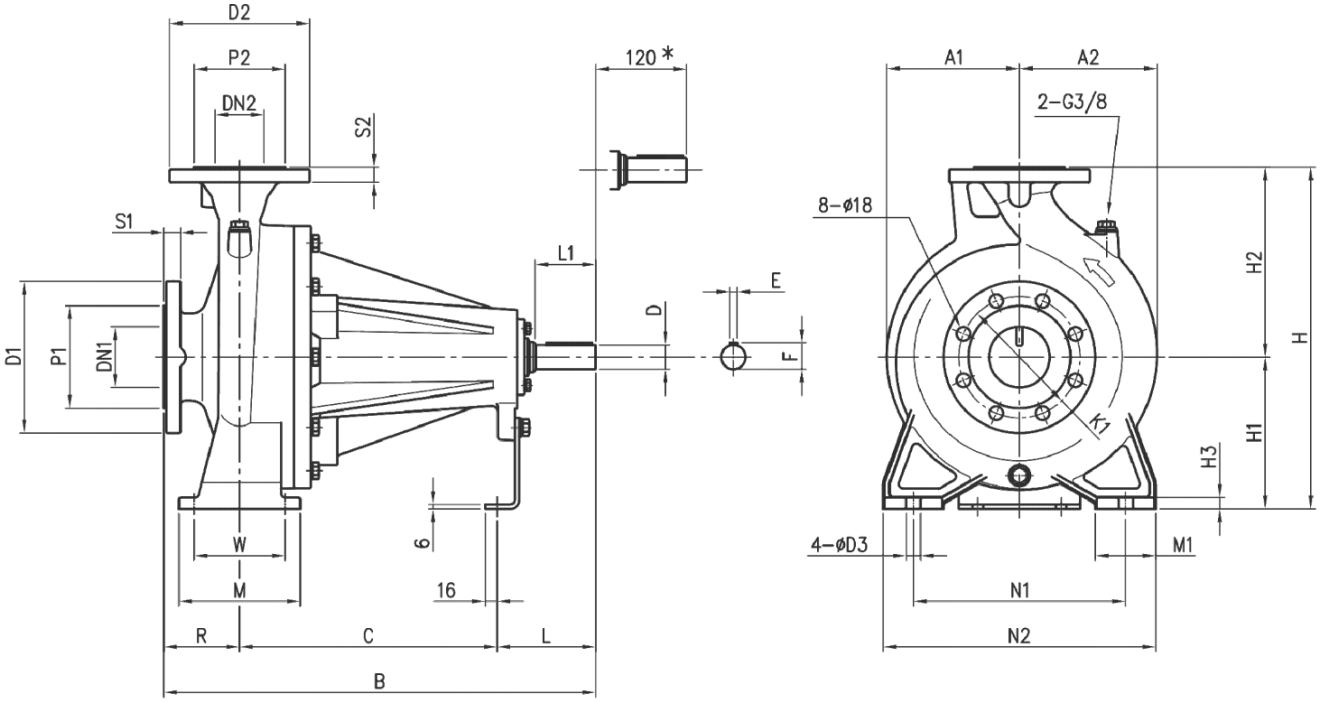

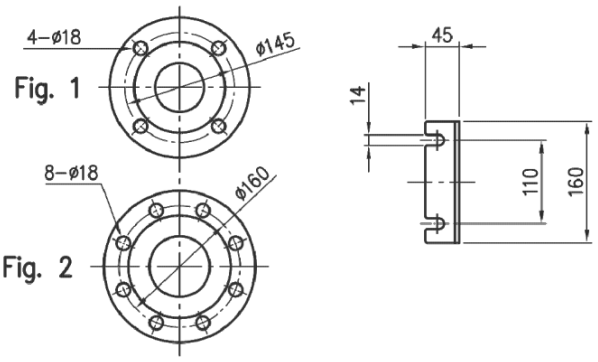

* Space for disassembly

Dimensions in	mm							
1	A1	147	Fig	2	Weight PUMP	60 kg		
2	A2	173	H	405				
3	B	485	H1	180				
4	C	260	H2	225				
5	D	24	H3	13				
6	D3	15	L	100				
7	Dia D1	225	L1	50				
8	Dia D2	200	M	125				
9	Dia DN1	100	M1	65				
10	Dia DN2	80	N1	250				
11	Dia K1	180	N2	320				
12	Dia P1	155	R	125				
13	Dia P2	135	S1	24				
14	E	8	S2	22				
15	F	27	W	95				

EBARA

(1/3)
Construction

Pump Name 3LPF 80-160/L

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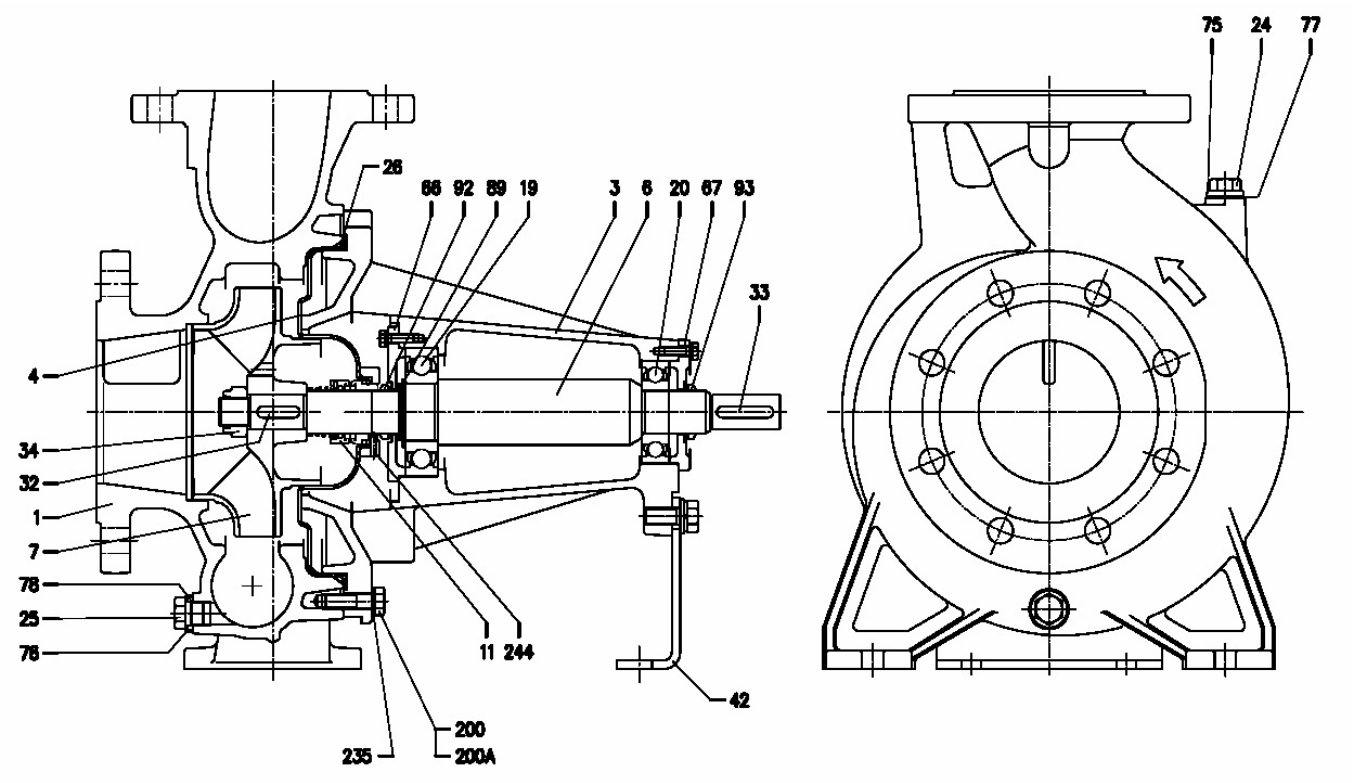

(2/3)
Construction

Pump Name 3LPF 80-160/L

Customer	Date 10.06.2024	Company
Contact	Item no.	Issued by
Phone	Project	Phone
E-mail	Project ID	E-mail

N°	PART NAME	MATERIAL	DIMENSION	STANDARD	Q.TY
1	Casing	EN 1.4401 (AISI 316)			1
3	Support	Cast iron EN-GJL-200-EN 1561			1
4	Casing cover	EN 1.4404 (AISI 316L)			1
6	Shaft	EN 1.4404 (AISI316L)-Part in contact with liquid			1
7	Impeller	EN 1.4401 (AISI 316)			1
11	Mechanical seal [2]	SiC/SiC/FPM			1
19	Bearing	-			1
20	Bearing	-			1
24	Plug	EN 1.4404 (AISI 316L)	G3/8	EPE DRAWING	1
25	Plug	EN 1.4404 (AISI 316L)	G3/8	EPE DRAWING	1
26	"O" ring	FPM [3]	227.96x5.34	OR 6895	1
32	Key	EN 1.4401 (AISI 316)	8x7x30	UNI 6604	1
33	Key	C 40	8x7x40		1
34	Impeller nut	EN 1.4404 (AISI 316L)	M20x1.5	UNI 7474	1
42	Pump support	Zincked steel		EPE DRAWING	1
66	Impeller side bearing cover	Cast iron EN-GJL-200-EN 1561			1
67	Motor side bearing cover	Cast iron EN-GJL-200-EN 1561			1
75	Washer (plug)	EN 1.4404 (AISI 316L)			1
76	Washer (plug)				1
77	O-ring (plug)	FPM			1
78	O-ring (plug)	EPDM (E option)			1
89	Snap ring	Carbon tool steels TC 80	Ø 40	UNI 7435	1
92	"V" ring	-	VS-0030		1
93	"V" ring				1
200	Screw	Stainless steel A2 70 class ISO 3506/1	M 10x35	UNI 5739	10
200A	Screw		M 10x30		2
235	Washer	EN 1.4301(AISI 304)	10.5	UNI 8842	12
244	Pin [1]	EN 1.4301(AISI 304)	4x15		1

[1] Not for H and E option.
[2] Special version: see **CONSTRUCTION 3**
[3] FPM for H-HW-HSW version
EPDM for E version, Q1Q1EGG, Q1U3EGG, U3CEGG, Q1AEGG

(3/3)
Construction

Pump Name 3LPF 80-160/L

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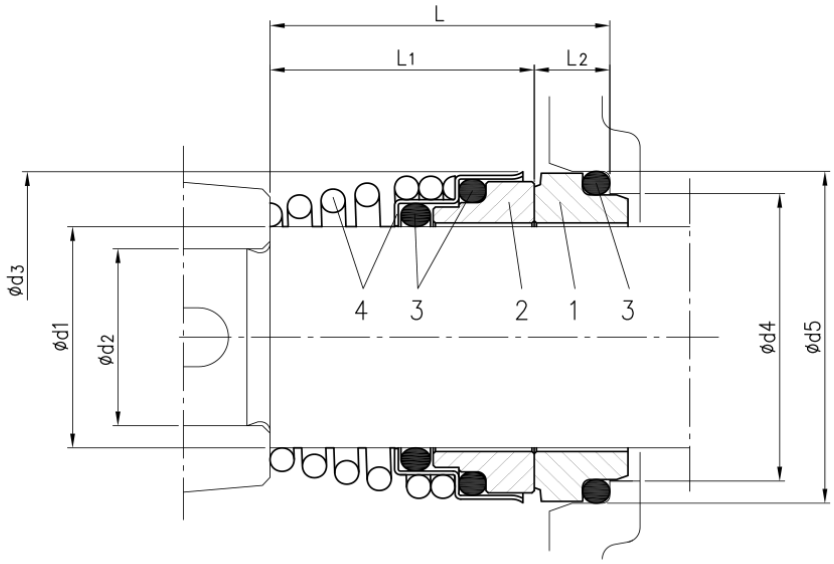

Version	Pump type	Dimensions								Material			
		d1	d2	d3	d4	d5	L	L1	L2	1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + spring
L ø30	65-160/15 65-200/250 80-160/200	30	24	44	39	45	42.5	31	11.5	SiC	SiC	FPM	EN 1.4571 (AISI 316Ti)
L ø35	80-250	35	29	49	44	50	42.5	31	11.5	SiC	SiC	FPM	EN 1.4571 (AISI 316Ti)