Technical Data

Pump Name 3LS4 50-200/2.2

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	3LS4 50-200/2.2	Frequency		Hz	50
10	Design	CENTRIFUGAL PUMPS	Installation type			STANDARD
11	Manufacturer	EBARA	Impeller Diameter	Max.	mm	224
12	Speed rpm	1400		Designed	mm	224
13	No. of Stage	1		Min.	mm	224
14	Connection Suction side	DIN 2532	Flow	Operating	m³/h	
15	Connection Discharge side	DIN 2532		Max-	m³/h	39
16	Max Working Pressure kPa	1000		Min-	m³/h	12
17	Shut-off head kPa	174.32	Head	Operating	m	
18	Total weight kg	See the table of "Dimensions".		- (Qmax.)	m	13.1
19	Shaft power kW			- (Qmin.)	m	17.5
20			Max. Shaft Power at max. impeller		kW	2.03
21	Required pump NPSH m		Efficiency		%	

Materials

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

Motor

28	Manufacturer	LAFERT	Insulation class		F
29	Type	TEFC_3S450-200/2.2_230_Three Phase	Phases		3~
30	Specific design	IE3 / 50 Hz / Pole pairs 2	Frame size		100 L
31	Rated power kW	2.2	Weight	kg	
32	Number of poles	4	Electric voltage	V	230
33	Speed rpm	1400	Electric current	A	10.2
34	Degree of protection	IP 55			
35					

Remarks

EBARA

Performance Curve

Pump Name 3LS4 50-200/2.2

Customer	Date 10.06.2024	Company
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Requested data

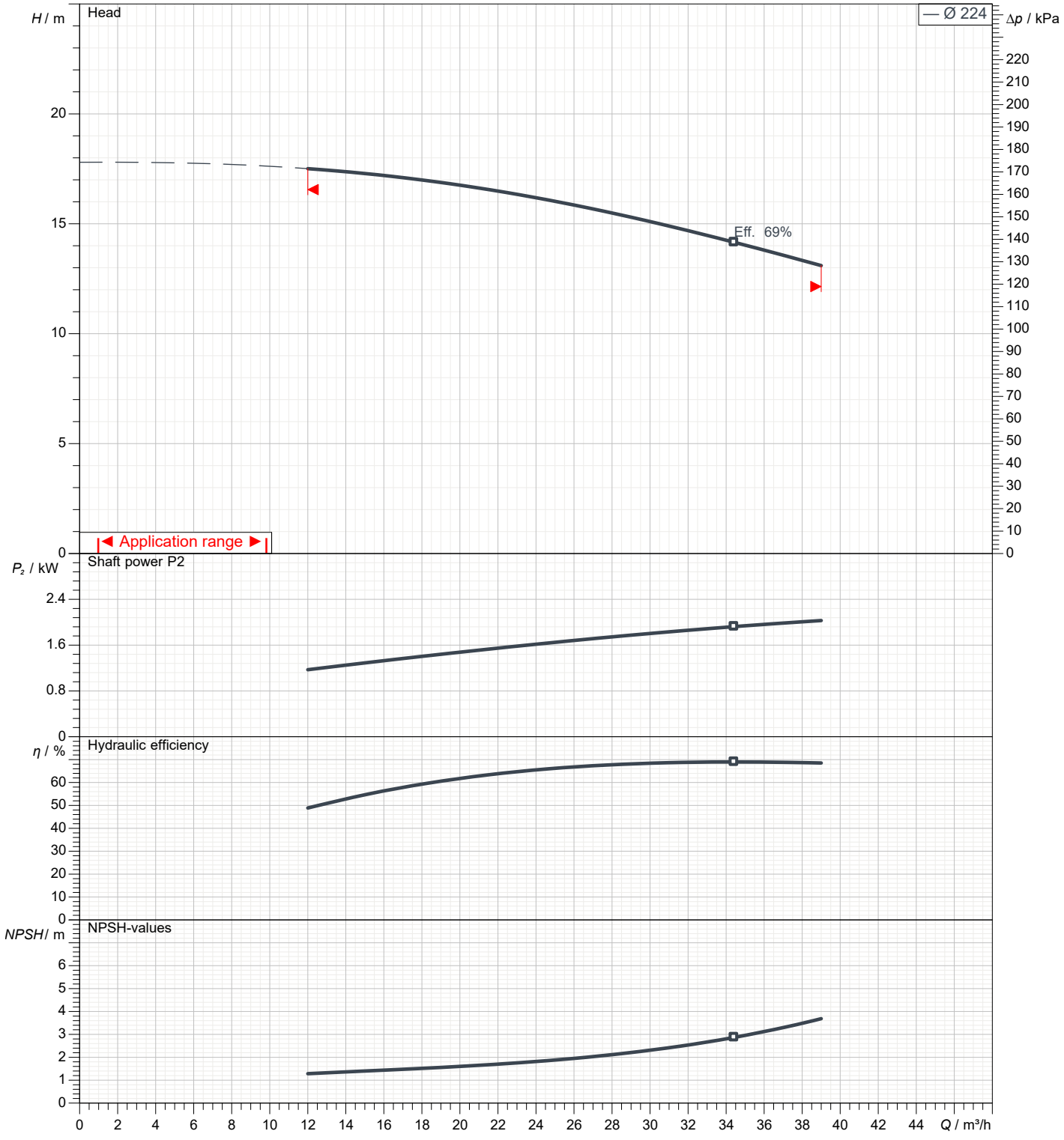
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

Pump

Operating flow	m³/h		Frequency	Hz	50
Operating head	m		Number of poles		4
Impeller diameter designed	mm	224	Speed	rpm	1400

Test standard: ISO 9906:2012 - Grade3B

Water; 20°C; 998.3kg/m³; 1cSt



Dimensions

Pump Name 3LS4 50-200/2.2

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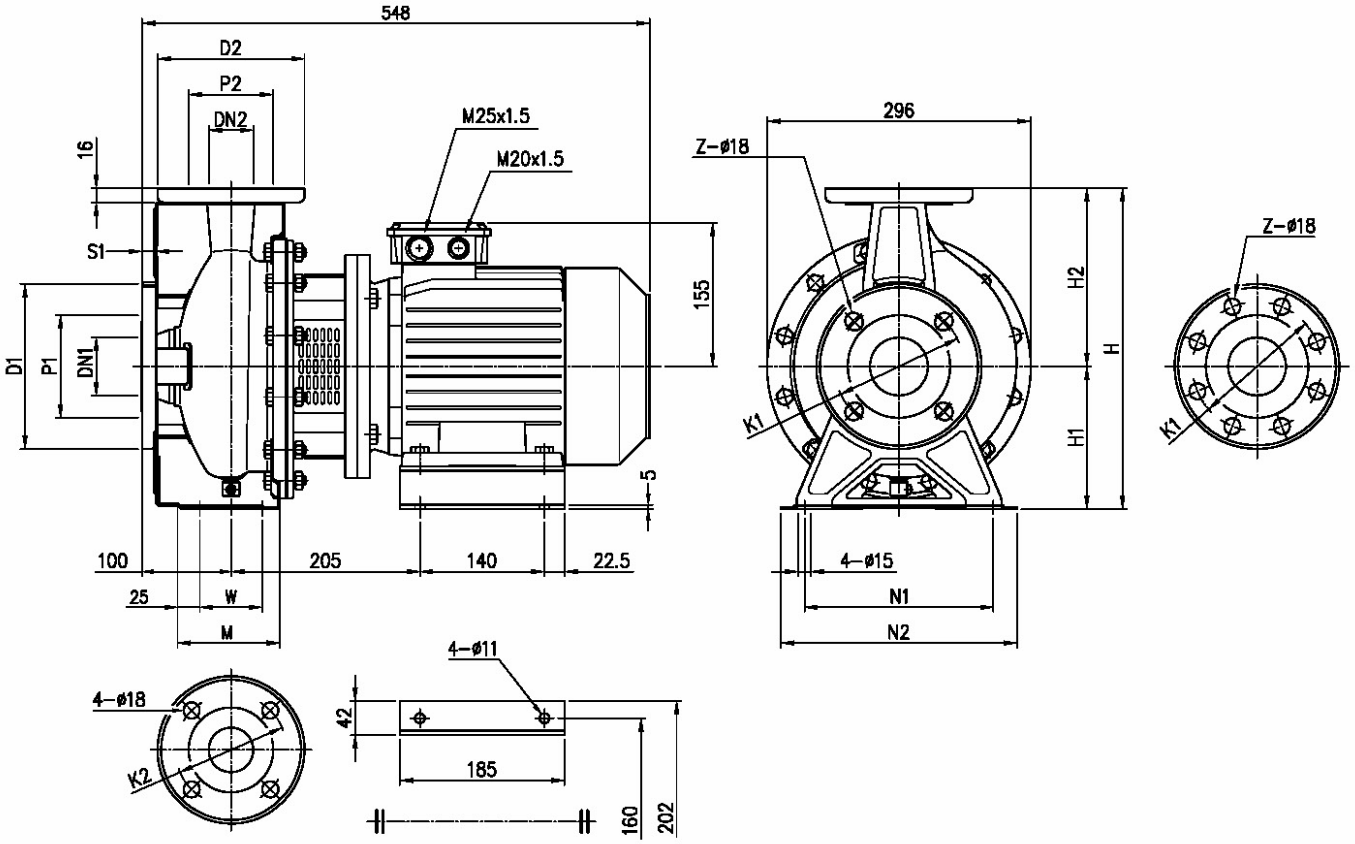

Dimensions in	mm							
1	Dia D1	185	W	212				
2	Dia D2	165	Weight P&M	43,4 kg				
3	Dia DN1	65	Z	4				
4	Dia DN2	50						
5	Dia K1	145						
6	Dia K2	125						
7	Dia P1	115						
8	Dia P2	95						
9	H	360						
10	H1	160						
11	H2	200						
12	H5	70						
13	M	265						
14	R	115						
15	S1	16						

EBARA

(1/3)
Construction

Pump Name 3LS4 50-200/2.2

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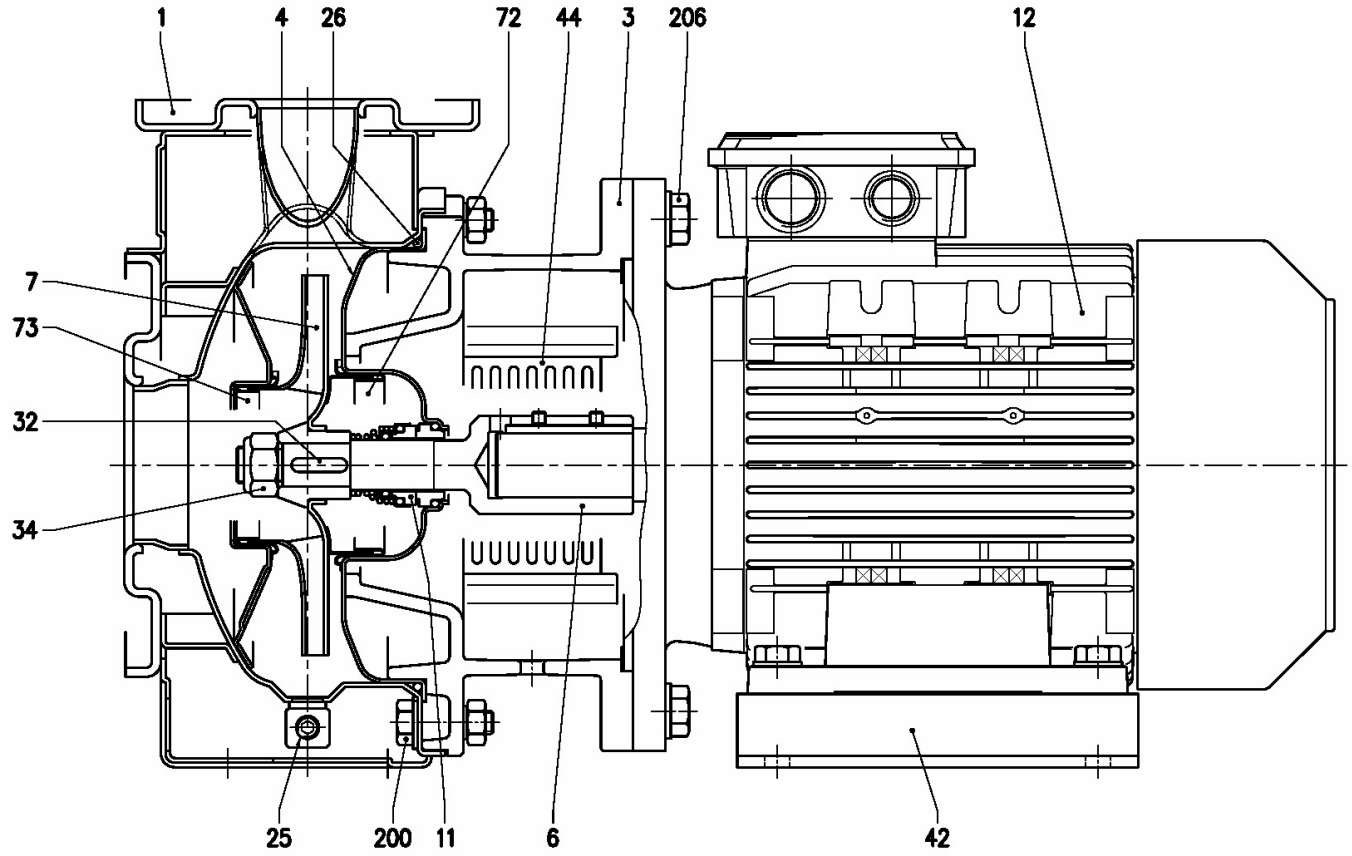

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Construction

Pump Name 3LS4 50-200/2.2

Customer	Date 10.06.2024	Company
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N°	PART NAME		MATERIAL 3S4	MATERIAL 3LS4	DIMENSIONS	STANDARD	Q.TY
001	Casing		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1
003	Motor bracket		Cast iron EN-GJL-200-EN 1561				1
004	Casing cover		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1
006	Coupling - Part in contact with liquid		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1
007	Impeller	32, 40, 50	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1
		65-125/160/200	CF8M - EN 1.4408 (AISI 316)				
011	Mechanical seal [4]		Carbon/Ceramic/NBR	SiC/SiC/FPM			1
012	Motor		-				1
025	Draing plug		EN 1.4401 (AISI 316) / PTFE		R 1/8" L=8	DIN 906	1
026	"O" ring	32-125, 40-125	NBR [5]	FPM	158.11x5.34	OR 6625	1
		32-160, 40-160, 50-125, 65-125			183.52x5.34	OR 6720	
		32-200, 40-200, 50-160, 50-200, 65-160, 65-200			227.96x5.34	OR 6895	
032	Key		EN 1.4401 (AISI 316)		6x6x25	UNI 6604	1
034	Impeller nut	Other model	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)	M16x1.5	UNI 7474	1
		50-200/2.2			M18x1.5		
042	Foot		Galvanized steel				[1]
044	Protection		EN 1.4301 (AISI 304)			EBARA DRAWING	2
072	Casing ring (not for 65 version) [2]		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1
073	Casing ring (not for 65 version)		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1
200	Screw	32-125, 40-125	Stainless steel A2 70 class ISO 3506/1		M 8x30	UNI 5739	8
		40-160, 40-200, 50-125, 50-160, 50-200, 65-125, 65-160, 65-200			M 10x35	UNI 5739	[3]
206	Screw	up to 0.37kW	Gv. Steel 8.8 strenght class ISO 898/1		M 8x20	UNI 5739	4
		from 0.55 to 1.5kW			M 10x25		
		for 2.2 and 3kW			M 12x30		

[1] Quantity = 1 up to 1.5kW
Quantity = 2 for 2.2 and 3kW
[2] Only for version 32-200, 40-200, 50-160, 50-200
[3] Quantity = 10 for 32-160, 40-160, 50-125, 65-125
Quantity = 12 for 32-200, 40-200, 50-160, 50-200, 65-160, 65-200
[4] Special version: see CONSTRUCTION 3
[5] FPM (H-HS-HW-HSW version)
EPDM (E version)

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Construction

Pump Name 3LS4 50-200/2.2

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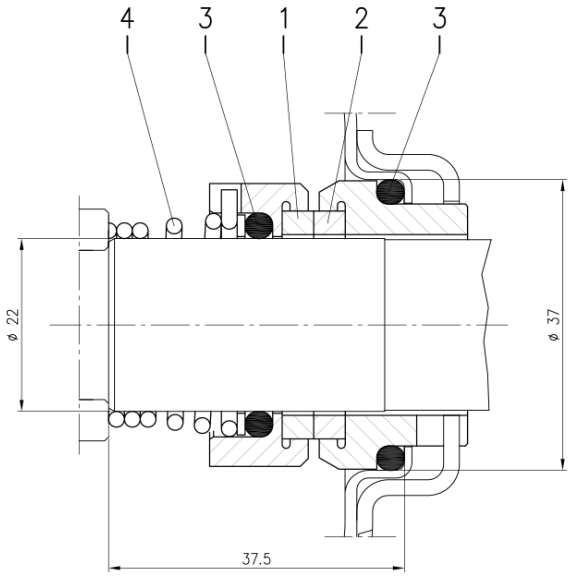

Version	Pump type	Material 1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + spring
L ø22	32-125/160/200 40-125/160/200 50-125/160/200 65-125/160/200 80-160	SiC	SiC	FPM	EN 1.4571 (AISI 316Ti)