

# Technical Data

Pump Name

3LSZ 65-160/11

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	3LSZ 65-160/11	Frequency	Hz 50
10	Design	CENTRIFUGAL PUMPS	Installation type	STANDARD
11	Manufacturer	EBARA	Impeller Diameter	Max. mm 168
12	Speed rpm	2900		Designed mm 168
13	No. of Stage	1		Min. mm 168
14	Connection Suction side	DIN 2532	Flow	Operating m³/h
15	Connection Discharge side	DIN 2532		Max- m³/h 138
16	Max Working Pressure kPa	1000		Min- m³/h 42
17	Shut-off head kPa	396.60	Head	Operating m
18	Total weight kg	See the table of "Dimensions".		- (Qmax.) m 20.0
19	Shaft power kW			- (Qmin.) m 38.6
20			Max. Shaft Power at max. impeller	kW 11.01
21	Required pump NPSH m		Efficiency	%

## Materials

22	Impeller	CF8M	
23	Casing	AISI 316L	
24	Shaft	AISI 316L	
25			
26			
27			

## Motor

28	Manufacturer	LAFERT	Insulation class	F
29	Type	TEFC_3S65-160/11_400_Three Phase	Phases	3~
30	Specific design	IE3 / 50 Hz / Pole pairs 1	Frame size	160 M
31	Rated power kW	11	Weight	kg 87.81
32	Number of poles	2	Electric voltage	V 400
33	Speed rpm	2900	Electric current	A 19.7
34	Degree of protection			
35				

## Remarks

# Performance Curve

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## Requested data

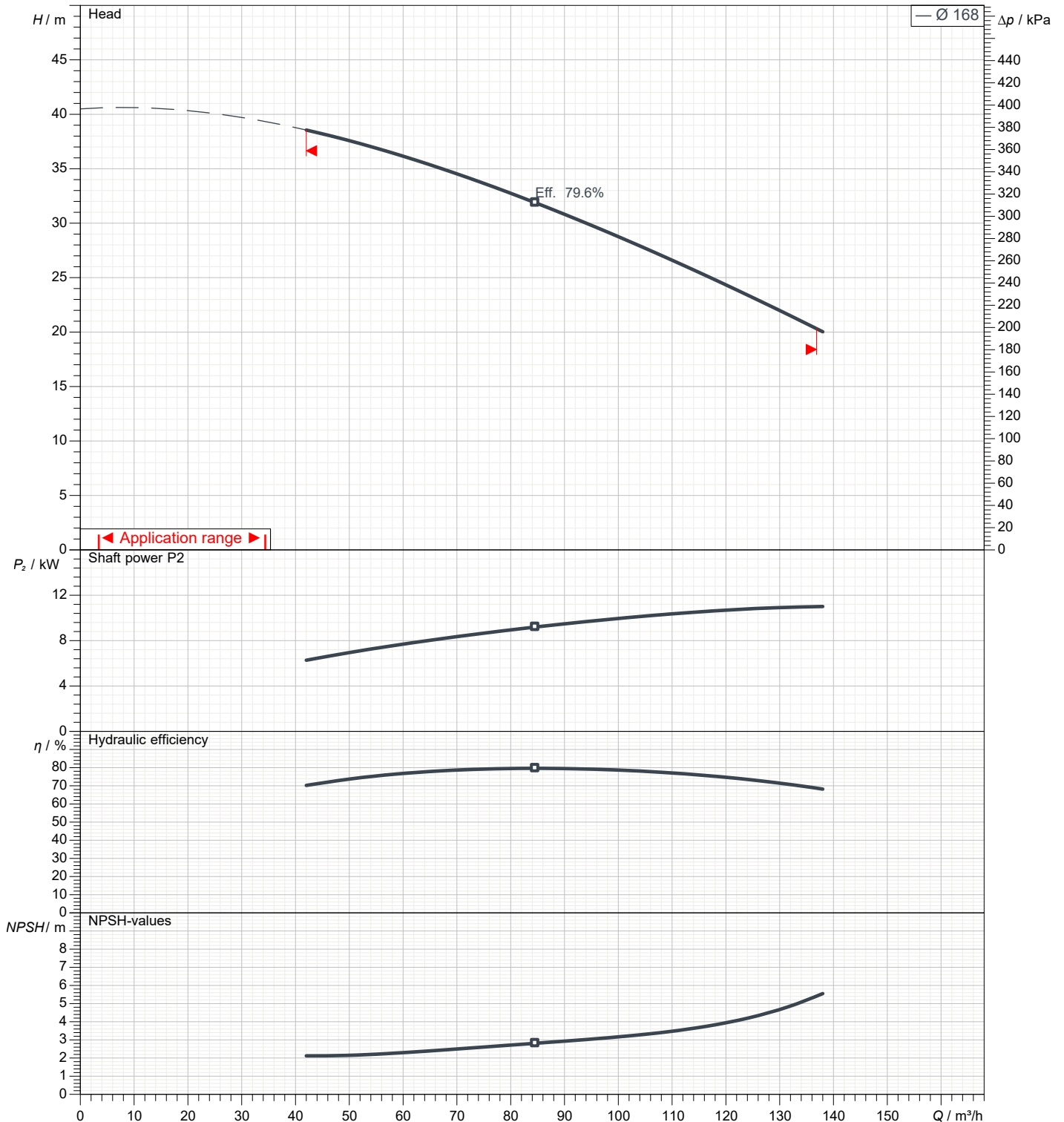
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

## Pump

Operating flow	m³/h		Frequency	Hz	50
Operating head	m		Number of poles		2
Impeller diameter designed	mm	168	Speed	rpm	2900

Test standard: ISO 9906:2012 - Grade3B

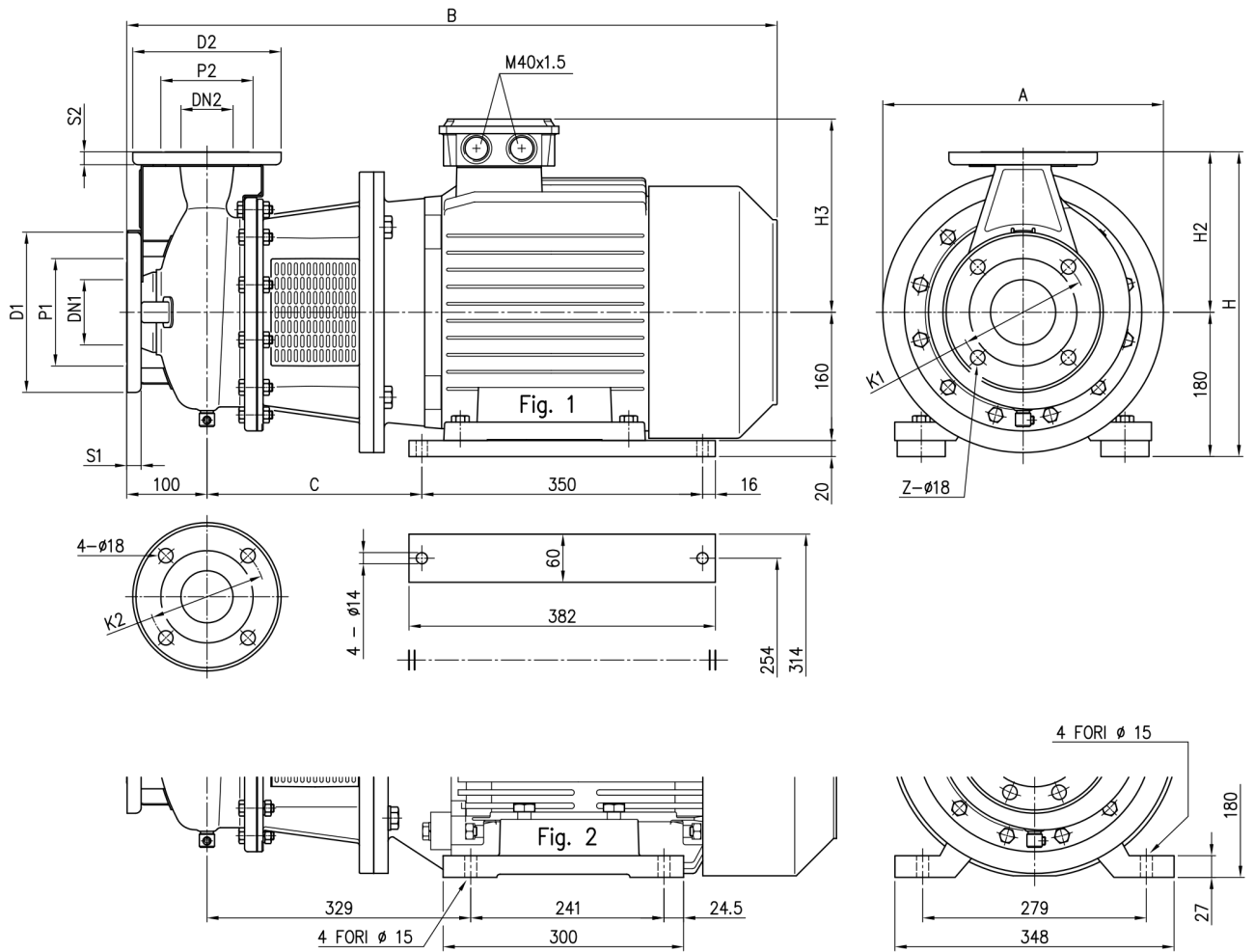
Water; 20°C; 998.3kg/m³; 1cSt



# Dimensions

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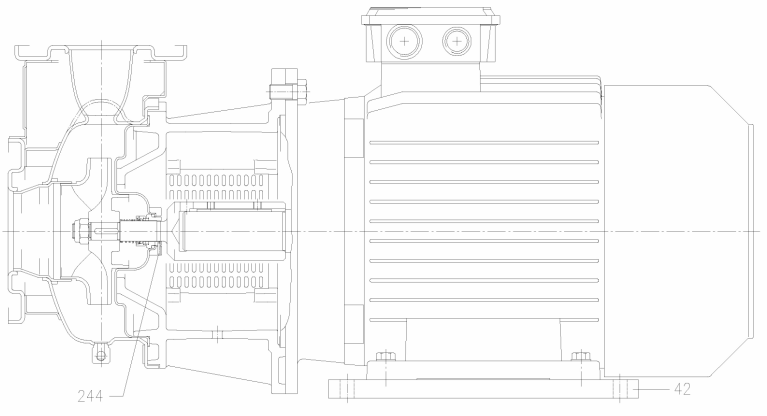
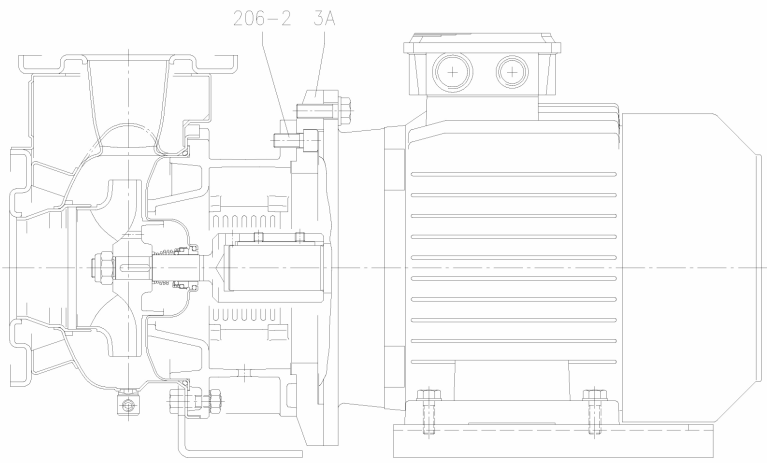
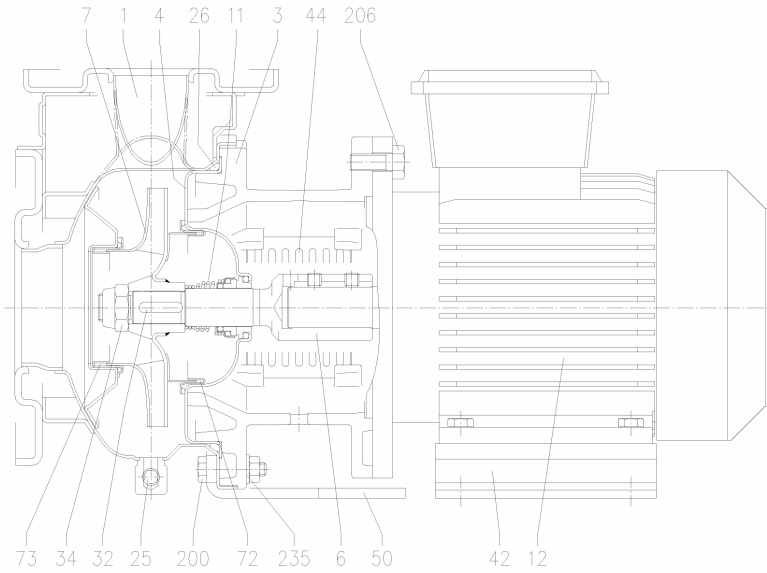
Dimensions in		mm						
1	A	350	S1	18				
2	B	796	S2	16				
3	C	258	Weight P&M	[86].8 kg				
4	Dia D1	200	Z	8				
5	Dia D2	185						
6	Dia DN1	80						
7	Dia DN2	65						
8	Dia K1	160						
9	Dia K2	145						
10	Dia P1	134						
11	Dia P2	115						
12	Fig	1						
13	H	380						
14	H2	200						
15	H3	238						

(1/3)

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**(2/3)****Construction****Pump Name 3LSZ 65-160/11**

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N°	PART NAME		MATERIAL	DIMENSIONS	STANDARD	Q.TY
1	Casing		EN 1.4404 (AISI 316L)			1
3	Motor bracket		Cast iron EN-GJL-200-EN 1561			1
3 A	Adapter ring [1]		Cast iron EN-GJL-200-EN 1561			1
4	Casing cover		EN 1.4404 (AISI 316L)			1
6	Coupling - Part in contact with liquid		EN 1.4404 (AISI 316L)			1
7	Impeller		EN 1.4404 (AISI 316L) [9]			1
11	Mechanical seal		SiC/SiC/FPM	[7]		1
12	Motor		-			1
25	Draing plug		EN 1.4401 (AISI 316) / PTFE	R 1/8" L=8	DIN 906	1
26	"O" ring	32-125, 40-125	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	
32	Key	Up to 11 kW	EN 1.4401 (AISI 316)	6x6x25	UNI 6604	1
		15 kW and above		8x7x30		
34	Impeller nut	Up to 11kW	EN 1.4404 (AISI 316L)	M16x1.5	UNI 7474	1
		50-200/15		M18x1.5		
		15 kW and above		M20x1.5		
42	Foot		Aluminium / Galvanized steel			[2]
44	Protection		EN 1.4301 (AISI 304)		EBARA DRAWING	1
50	Casing foot (only from 1.1 kW to 9.2 kW)		Galvanized Steel			1
72	Casing ring [3]		EN 1.4404 (AISI 316L)			1
73	Casing ring		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
		50-200, 65-125, 65-160, 65-200		M 10x35	UNI 5739	[4]
201	Screw		Galvanized Steel 8.8	M 10x16	UNI 5739	[5]
206	Screw for bracket		Galvanized Steel 8.8	M 10x40	UNI 5739	4
206-2	Screw adapter ring [1]		Galvanized Steel 8.8		UNI 5931	4
235	Washer	32-125, 40-125	Stainless steel A2 70 class ISO 3506/1	M 8.4x17	UNI 6592	8
		50-200, 65-125, 65-160, 65-200		M 10.5x21	UNI 6592	[4]
244	Pin [6]		EN 1.4301 (AISI 304)		UNI 5931	4

[1] Only for version 65-125/5.5/7.5

[2] Quantity =0 for version 65-200/22

Quantity =1 for version for 32-125/160, 50-125/2.2

Quantity =2 for version for 32-200, 40-125/160/200, 50-125/3/4, 50-160/200, 65-125, 65-160, 65-200/15/18.5

[3] Only for version 32-200, 40-200, 50-160, 50-200

[4] 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

[5] Only for version 32-125/1.1, 32-160/1.5, 32-160/1.5, 32-160/2.2, 40-125/1.5, 40-125/2.2, 50-125/2.2

[6] Only for 65-160/15, 65-200

[7] Special version: see CONSTRUCTION 3

[8] FPM for H-HS-HW-HSW version

EPDM for E version, U3U3EGG, Q1Q1EGG, Q1U3EGG, Q1AEGG, U3CEGG

U3U3EGG not available for 65-150/15 and 65-200

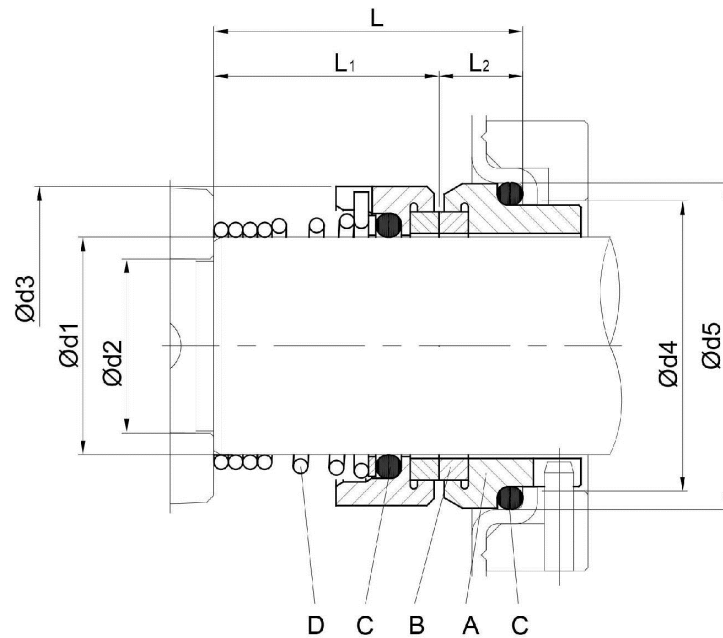
[9] CF8M – EN 1.4408 (AISI316) material for 65-125 up to 65-200

(3/3)

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Version	Pump type	Dimensions [mm]							Material Standard				
		d1	d2	d3	d4	d5	L	L1	L2	A Stationary seal ring	B Rotary seal ring	C O-ring	D Frame + spring
L	32-125/160/200 40-125/160/200 50-125/160 65-125 65-160/7,56-9,26-116	22	19	36	31	37	37.5	27.5	9.5	SiC	SiC	FPM	EN 1.4401 (AISI 316)