

# Technical Data

Pump Name

3ES4 50-200/0.75

Customer	Date	09.06.2024	Company
Contact	Item no.		Issued by
Phone	Project		Phone
E-mail	Project ID		E-mail

## Requested data

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

## Pump

9	Pump Name	3ES4 50-200/0.75	Frequency	Hz	50	
10	Design	Inline vertical	Installation type		With motor	
11	Manufacturer	EBARA	Impeller Diameter	Max.	mm	
12	Speed	rpm		1450	Designed	mm
13	No. of Stage	1		Min.	mm	183
14	Connection	Suction side	EN	16k	Flow	
15	Connection	Discharge side	EN	16k		Operating
16	Max Working Pressure	kPa	1600	Max-		m³/h
17	Shut-off head	kPa	102.63	Head	Operating	
18	Total weight	kg	See the table of "Dimensions".		- (Qmax.)	m
19	Shaft power	kW			- (Qmin.)	m
20				Max. Shaft Power at max. impeller	kW	
21	Required pump NPSH	m		Efficiency	%	

## Materials

22	Impeller	AISI 304	
23	Casing	Cast iron	
24	Shaft	AISI 304(wet extension)	
25			
26			
27			

## Motor

28	Manufacturer	LAFERT	Insulation class	F	
29	Type	TEFC_3ES_4_0.75_230_1	Phases	3~	
30	Specific design	TEFC / 50 Hz / Pole pairs 2	Frame size	80	
31	Rated power	kW	0.75	Weight	kg
32	Number of poles	4	Electric voltage	V	230
33	Speed	rpm	1450	Electric current	A
34	Degree of protection	IP55			
35					

## Remarks

# Performance Curve

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## Requested data

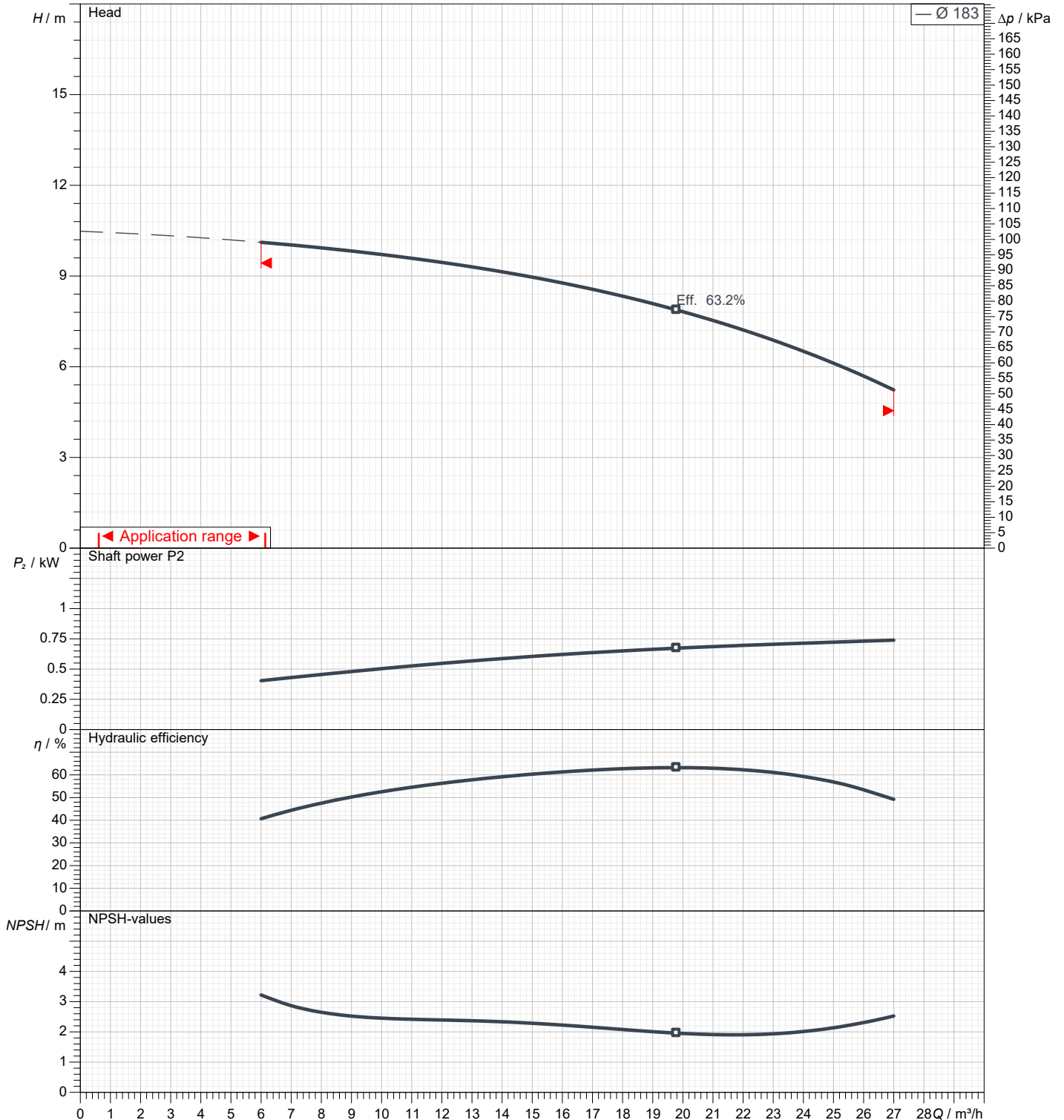
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

## Pump

Operating flow	m³/h	Frequency	Hz	50	
Operating head	m	Number of poles		4	
Impeller diameter designed	mm	183	Speed	rpm	1450

Test standard: ISO 9906:2012 - Grade3B

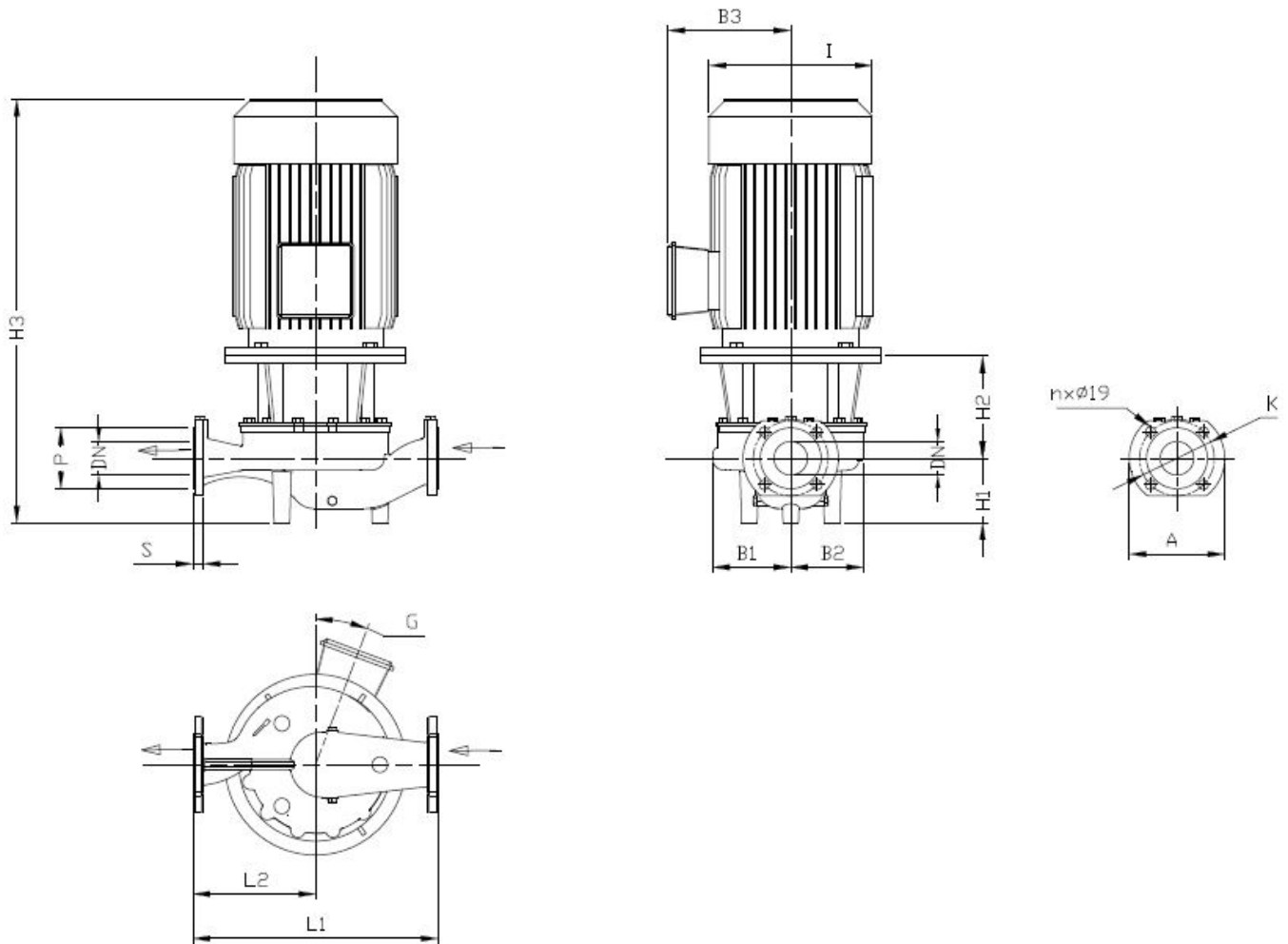
Water; 20°C; 998.3kg/m³; 1cSt



# Dimensions

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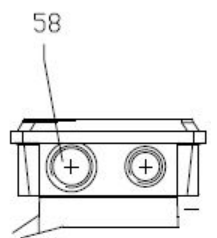
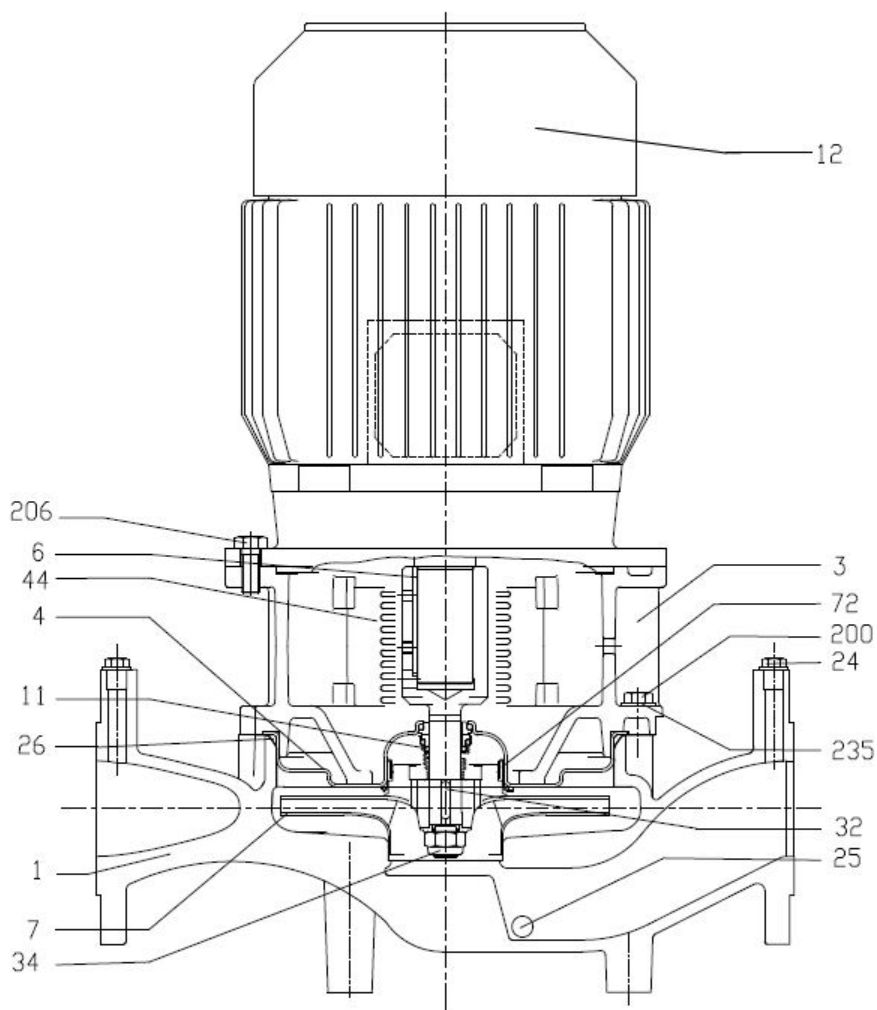
Dimensions in		mm						
1	A	165	Φ K	125				
2	B1	148	Φ P	99				
3	B2	141						
4	B3	139						
5	G	0						
6	H1	115						
7	H2	118						
8	H3	465						
9	I	160						
10	L1	440						
11	L2	220						
12	n	4(Num)						
13	S	20						
14	Weight P&M	38.7 kg						
15	Φ DN	50						

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# Construction

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# Construction

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No	PART NAME	MATERIAL	DIMENSIONS	STANDARD	QTY	
1	Casing	Cast iron EN-GJL-250-EN 1561			1	
3	Motor bracket	Cast iron EN-GJL-200-EN 1561			1	
4	Casing cover	EN 1.4301 (AISI 304)			1	
6	Coupling - Part in contact with liquid	EN 1.4301 (AISI 304)			1	
7	impeller	EN 1.4301 (AISI 304)			1	
	50-200	EN 1.4401 (AISI 316)				
	80-200	EN 1.4401 (AISI 316)				
11	Mechanical seal [2]	SiC/met Carbon/EPDM			1	
12	Motor				1	
24	Plug	Brass	G1/4	DIN 906	2	
25	Drain plug	Brass	G1/4	DIN 906	4	
26	O-ring	EPDM[3]	227.96x5.34	OR 6895	1	
32	Key	EN 1.4401(AISI316)	6x6x25	UNI 6604	1	
34	impeller nut	EN1.4301(AISI 304)	M16x1.5	UNI 7474	1	
44	Protection	EN 1.4301 (AISI304)		EBARA DRAWING	2	
72	Casing ring (not for 80 version) [1]	EN 1.4301 (AISI 304)			1	
200	Screw	50-200,80-200/2.2	Gv. Steel 8.8 strength class ISO 898/1	M10x35	UNI 5739	12
		80-200/3				10
206	Screw	from 0.55 to 1.5kW	Gv. Steel 8.8 strength class ISO 898/1	M10x25	UNI 5739	4
		for 2.2 and 3kW				
235	Washer		Galvanized Steel	10.5x21	UNI 6592	12

[1] Only for version 32-200, 40-200,50-200, 65-160, 65-200

[2] Special version: see mechanical seal page

[3] FPM for Q1AVGG

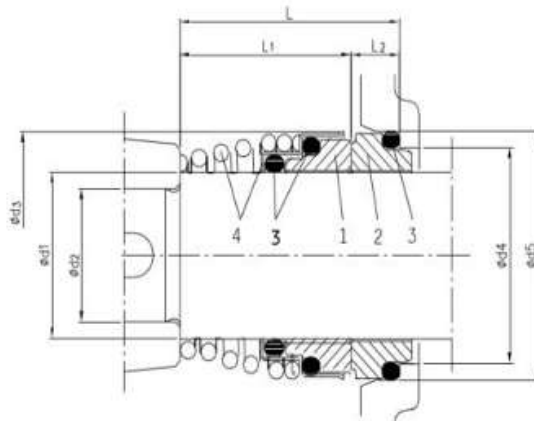
EPDM for Q1AEGG, Q4Q1EGG

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Version	Pump type	Dimensions [ mm ]								Material			
		d1	d2	d3	d4	d5	L	L1	L2	1 Rotary seal ring	2 Stationary seal ring	3 Rubber	4 Frame + Spring
Standard (Q1AEGG)	32-160/200 40-160/200 50-125/160/200 65-125/160/200 80-160/200 100-160	22	19	36	31	37	37.5	27.5	10	Silicon Carbide	Metallised Carbon	EPDM	EN 1.4401 (AISI 316)