

Technical Data

Pump Name

3P4 50-160/1.1

Customer	Date	2024-06-12	Company
Contact	Item no.		Issued by
Phone	Project		Phone
E-mail	Project ID	Proiect redenumit 2024-06-12 12:10:37	E-mail

Requested data

1	Pump type	CENTRIFUGAL PUMPS	Fluid	Water
2	Number of pumps / Reserve	1 / 0	Liquid temperature	°C
3	Flow	m³/h	Kin. viscosity	mm²/s
4	Head	m	Vapour pressure	bar
5	Geodetic head	m	PH value	
6	Inlet pressure (pin)	bar	Density	kg/m³
7	Available system NPSH		Solids	Weight %
8	Ambient temperature	°C		

Pump

9	Pump Name	3P4 50-160/1.1	Frequency	Hz	50	
10	Design	CENTRIFUGAL PUMPS	Installation type		STANDARD	
11	Manufacturer	EBARA	Impeller Diameter	Max.	mm	
12	Speed	rpm		1400	Designed	mm
13	No. of Stage	1		Min.	mm	166
14	Connection	Suction side	DIN 2532	Flow	Operating	m³/h
15	Connection	Discharge side	DIN 2532		Max-	m³/h
16	Max Working Pressure	bar	10		Min-	m³/h
17	Shut-off head	bar	0.93	Head	Operating	m
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	0.84	
21	Required pump NPSH	m	Efficiency	%		

Materials

22	Impeller	AISI 304		
23	Casing	AISI 304		
24	Shaft	AISI 304		
25				
26				
27				

Motor

28	Manufacturer	LAFERT	Insulation class	F	
29	Type	TEFC_3P450-160/1.1_230_Three Phase	Phases	3~	
30	Specific design	IE3 / 50 Hz / Pole pairs 2	Frame size	90 S	
31	Rated power	kW	1.1	Weight	kg
32	Number of poles	4	Electric voltage	V	230
33	Speed	rpm	1400	Electric current	A
34	Degree of protection	IP 55			
35					

Remarks

Performance Curve

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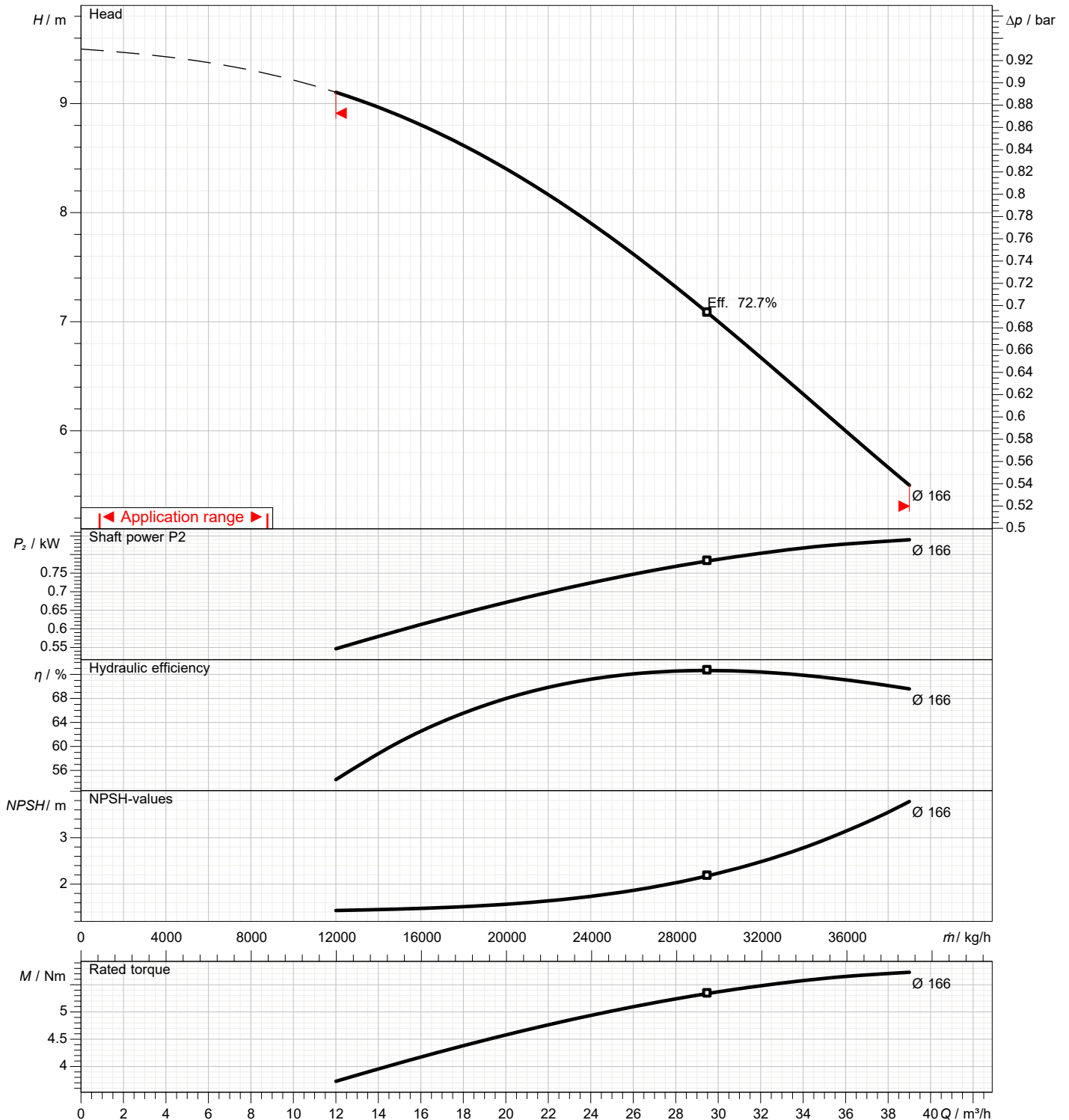
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

Pump

Operating flow	m³/h		Frequency	Hz	50
Operating head	m		Number of poles		4
Impeller diameter designed	mm	166	Speed	rpm	1400

Test standard: ISO 9906:2012 - Grade3B

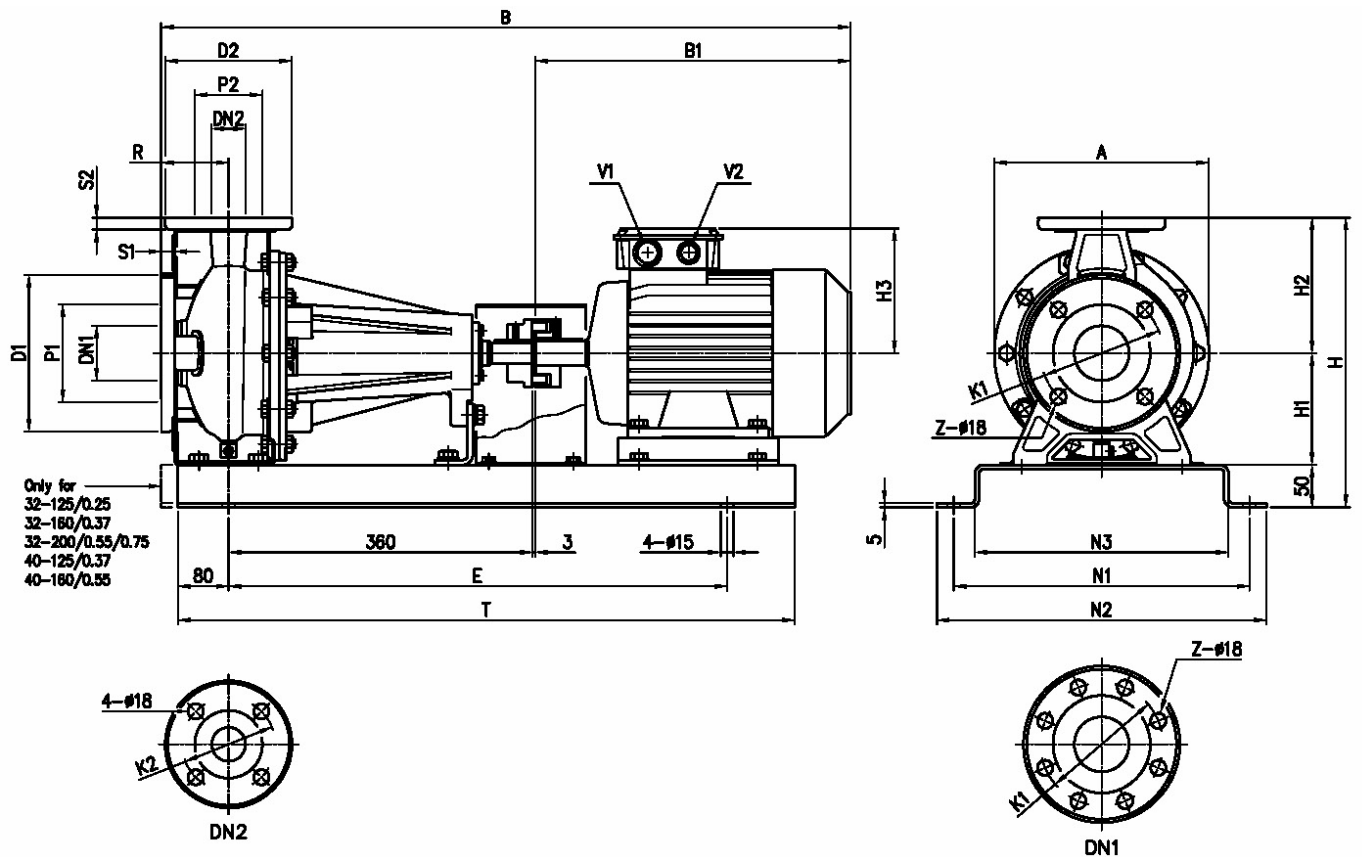
Water; 20°C; 998.3kg/m³; 1mm²/s



Dimensions

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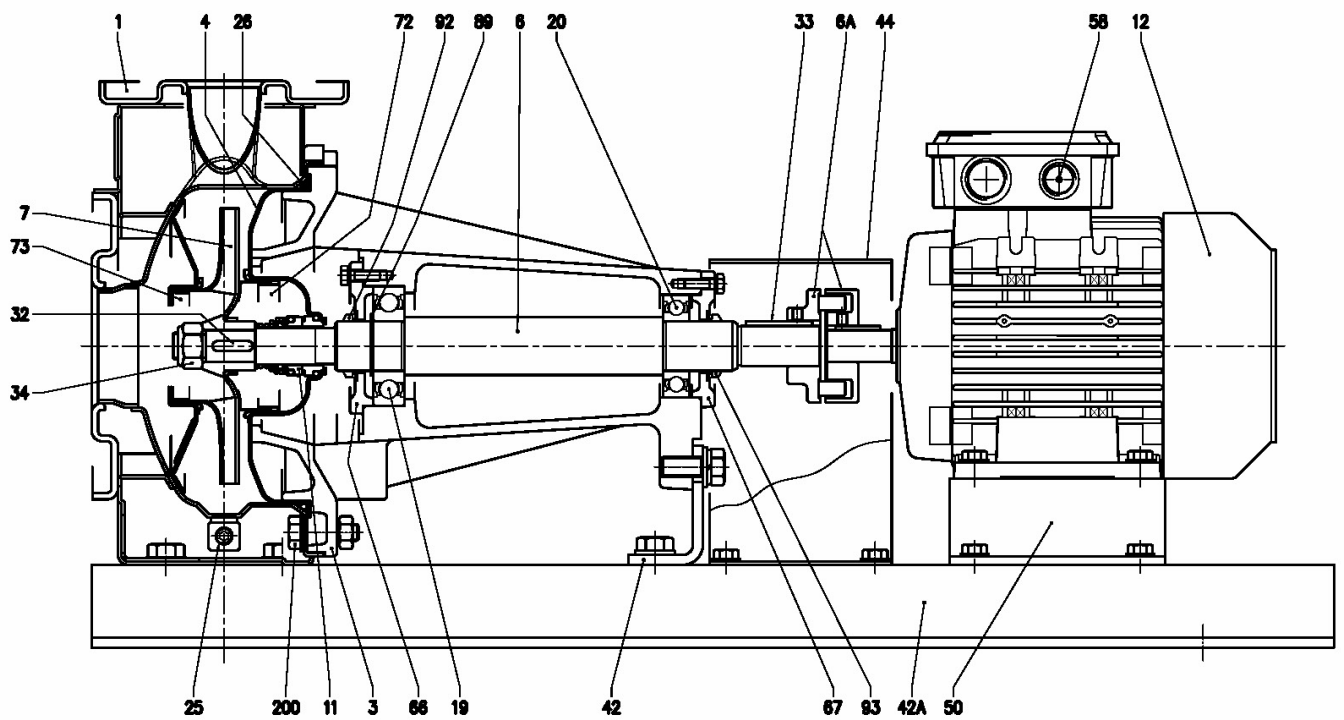
Dimensions in		mm						
1	A	296	H3	148				
2	B	780	N1	350				
3	B1	317	N2	390				
4	Dia D1	185	N3	300				
5	Dia D2	165	R	100				
6	Dia DN1	65	S1	16				
7	Dia DN2	50	S2	16				
8	Dia K1	145	T	750				
9	Dia K2	125	V1	M25x1.5				
10	Dia P1	115	V2	M20x1.5				
11	Dia P2	95	Weight P&M	50,3 kg				
12	E	590	Z	4				
13	H	390						
14	H1	160						
15	H2	180						

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Construction

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Construction

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N°	PART NAME	MATERIAL		DIMENSIONS	STANDARD	Q.TY	
		3P4	3LP4				
1	Casing	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1	
3	Support	Cast iron EN-GJL-200-EN 1561				1	
4	Casing cover	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1	
6	Shaft - Part in contact with liquid	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1	
6 A	Flexible coupling	Cast iron EN-GJL-250-EN 1561				1	
7	Impeller	32-40-50 65-125/160/200	EN 1.4301 (AISI 304) EN 1.4404 (AISI 316L)			1	
11	Mechanical seal	[3]	Carbon/Ceramic/NBR	SIC/SIC/FPM		1	
12	Motor		-			1	
19	Bearing		-			1	
20	Bearing		-			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	NBR [4]	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	EN 1.4401 (AISI 316)		6x6x25	UNI 6604	1	
33	Key	C 40		8x7x40	UNI 6604	1	
34	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		
42	Pump support	Galvanized steel			EBARA DRAWING	1	
42 A	Base	Galvanized steel				1	
44	Protection	Galvanized steel				1	
50	Foot	Galvanized steel				1	
58	Fasting nut	-				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	
72	Casing ring (not for 65 version) [1]	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1	
73	Casing ring (not for 65 version)	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1	
89	Snap ring	32-125, 32-160, 40-125, 50-125	Carbon tool steel TC 80		Ø30	UNI 7435	1
		Other model			Ø40		
92	O ring		-	VS - 0030		1	
93	O ring		-	VS - 0030		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	

[1] For version: 32-200, 40-200, 50-160, 50-200

[2] 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

[3] Special version: see CONSTRUCTION 3

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

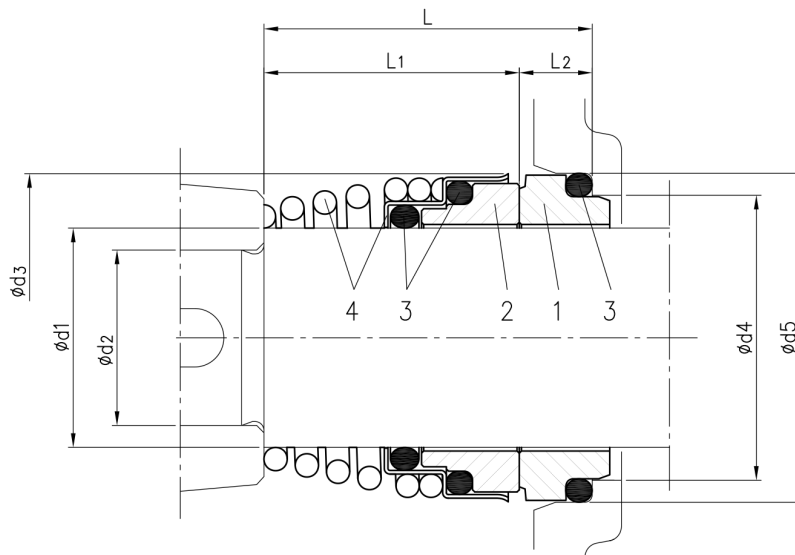
EPDM for E version, Q1AEGG, Q1Q1EGG, Q1U3EGG, U3CEGG, U3U3EGG

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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
Standard	32-125/160/200 40-125/160/200 50-125/160/200 65-125/160/200	22	19	38	31	37	37.5	27.5	10	Carbon	Ceramic	NBR	EN 1.4401 (AISI 316)