

Technical Data

Pump Name

MMD4 50-160/1.1 QQPFF

Customer	Date	2024-06-16	Company
Contact	Item no.		Issued by
Phone	Project		Phone
E-mail	Project ID	Proiect redenumit 2024-06-16 15:45:44	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	mm²/s 1.005
4	Head m		Vapour pressure	bar 0.0234
5	Geodetic head m		PH value	
6	Inlet pressure (pin) bar	0	Density	kg/m³ 998.3
7	Available system NPSH		Solids	Weight % 0
8	Ambient temperature °C	20		

Pump

9	Pump Name	MMD4 50-160/1.1 QQPFF	Frequency	Hz	50
10	Design	CENTRIFUGAL PUMPS	Installation type		STANDARD
11	Manufacturer	EBARA	Impeller Diameter	Max.	mm 169
12	Speed rpm	1450		Designed	mm 169
13	No. of Stage	1		Min.	mm 169
14	Connection Suction side		Flow	Operating	m³/h
15	Connection Discharge side			Max-	m³/h 36
16	Max Working Pressure bar	10		Min-	m³/h 8.5
17	Shut-off head bar	0.89	Head	Operating	m
18	Total weight kg	See the table of "Dimensions".		- (Qmax.)	m 5.5
19	Shaft power kW			- (Qmin.)	m 9.1
20			Max. Shaft Power at max. impeller	kW	0.87
21	Required pump NPSH m		Efficiency	%	

Materials

22	Impeller	EN-GJL-200		
23	Intermediate casing	EN-GJL-200		
24	Bottom casing	EN-GJL-200		
25	Shaft	Stainless steel		
26	Gasket	AF1600		
27				

Motor

28	Manufacturer	ICME	Insulation class	F
29	Type	TEFC_MMD4// 50-160/1.1_230_Three Phase	Phases	3~
30	Specific design	IE3 / 50 Hz / Pole pairs 2	Frame size	90
31	Rated power kW	1.1	Weight	kg 14
32	Number of poles	4	Electric voltage	V 230
33	Speed rpm	1420	Electric current	A 4.2
34	Degree of protection	IP 55		
35				

Remarks

Performance Curve

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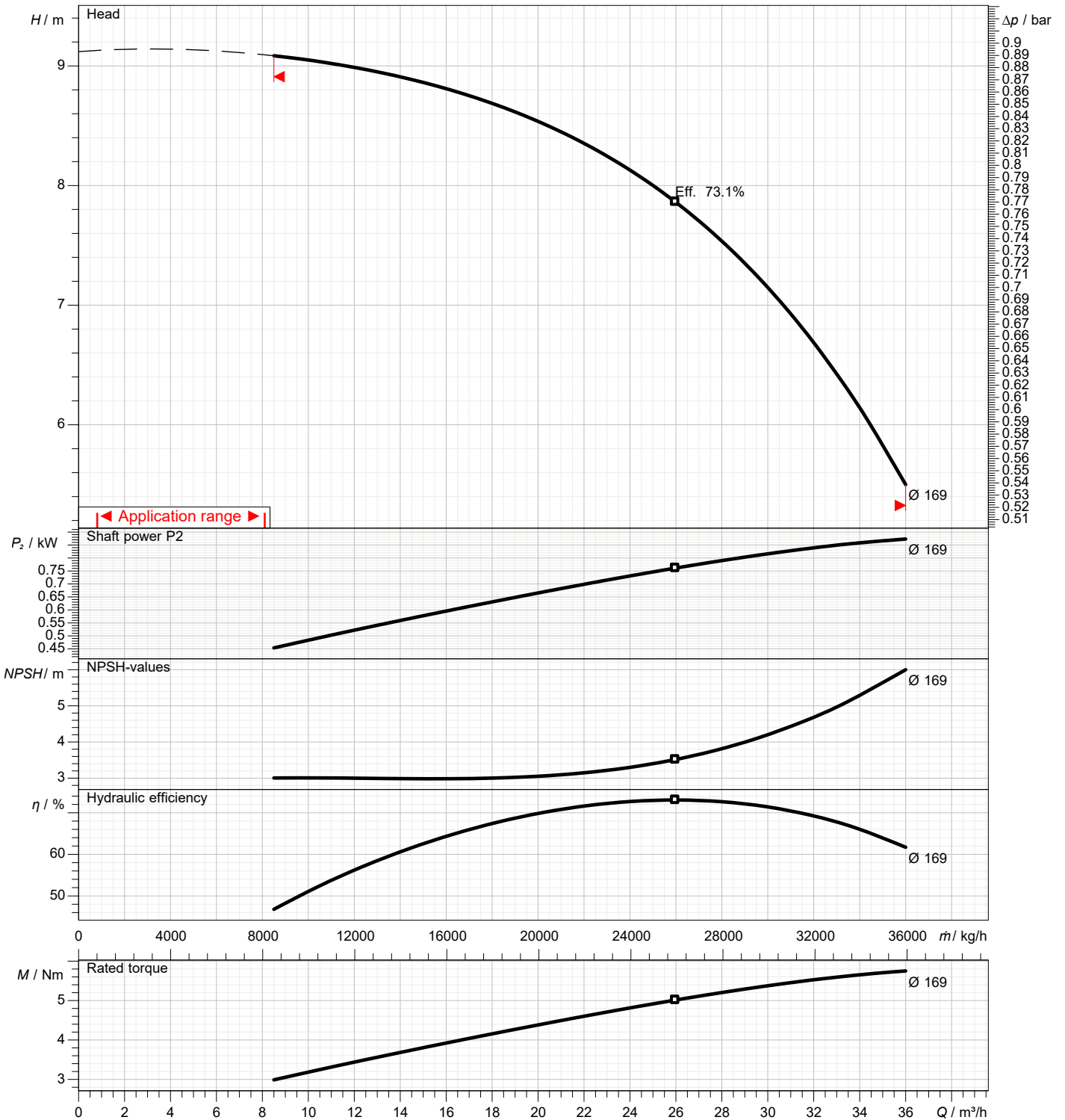
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

Pump

Operating flow	m³/h		Frequency	Hz	50
Operating head	m		Number of poles		4
Impeller diameter designed	mm	169	Speed	rpm	1450

Test standard: ISO 9906:2012 - Grade3B

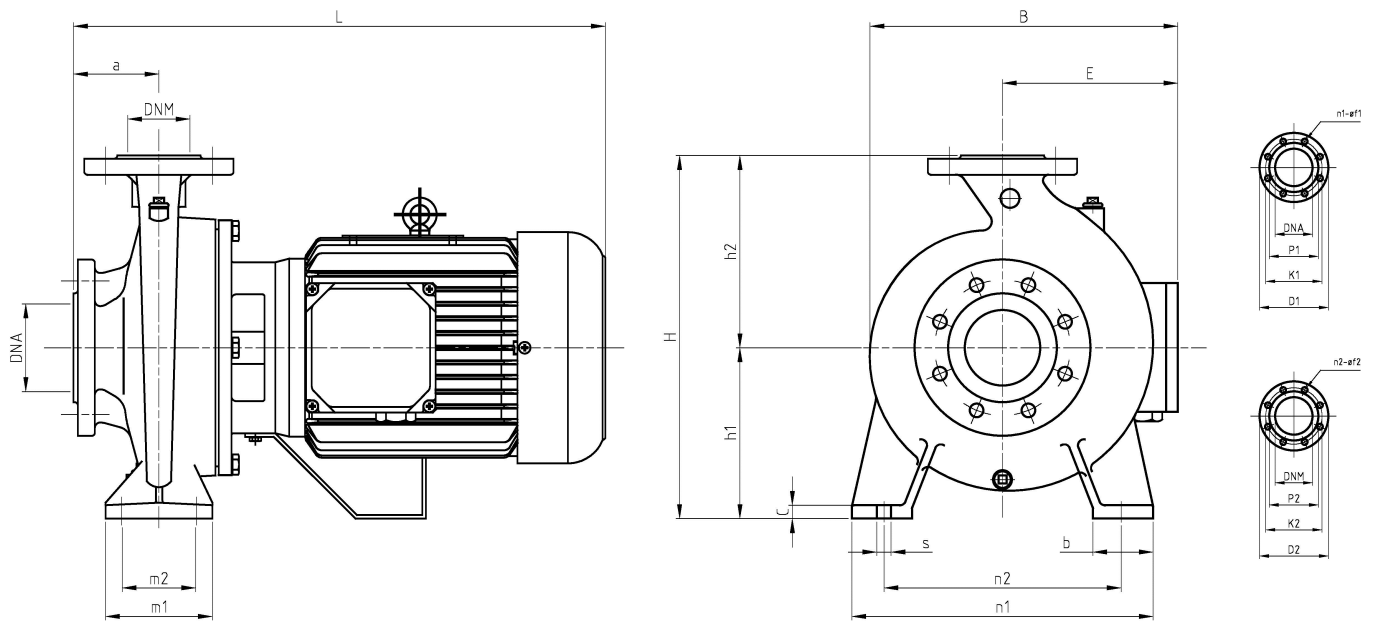
Water; 20°C; 998.3kg/m³; 1mm²/s



Dimensions

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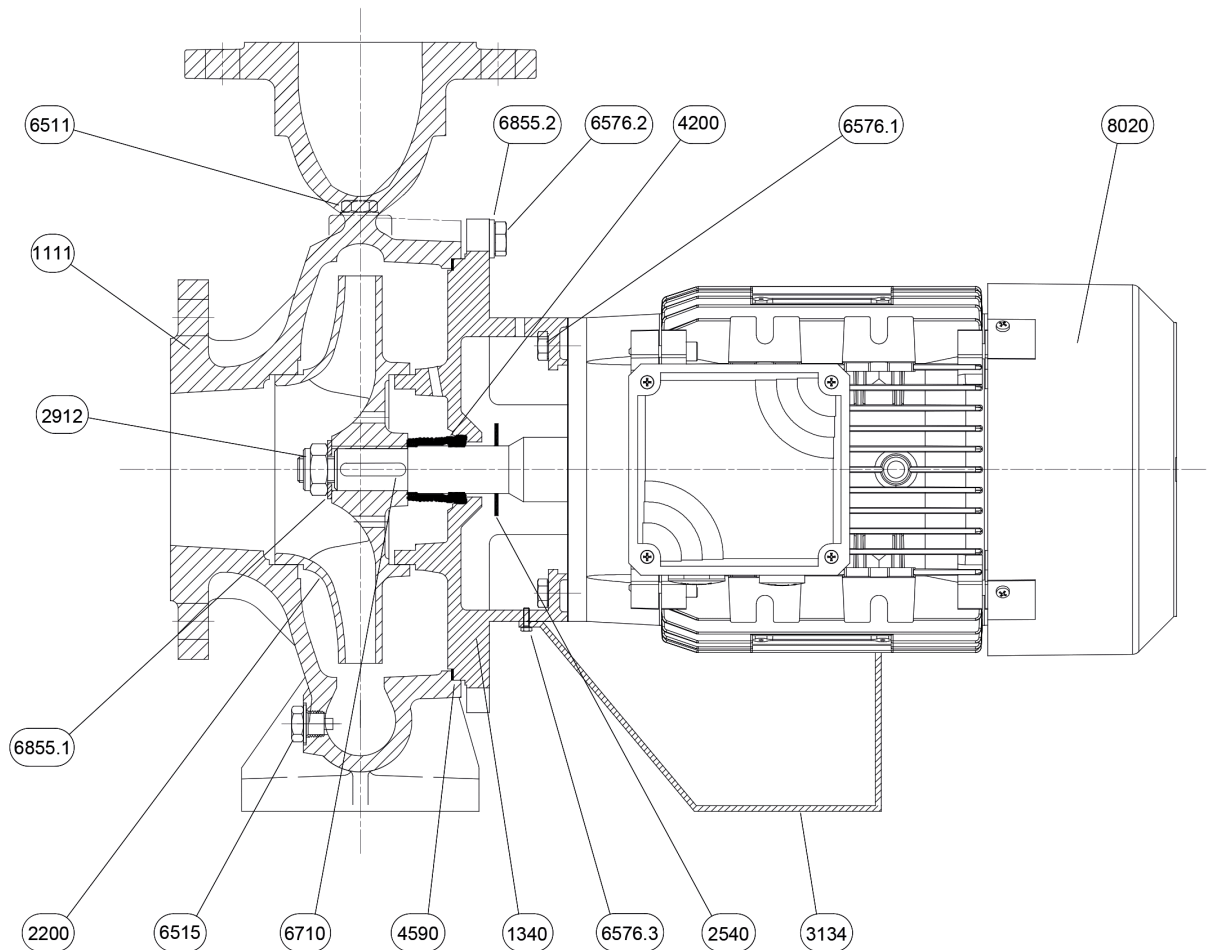
Dimensions in		mm	
1	a	100	Dia P2 102
2	b	50	E 138
3	B	269	H 340
4	C	12	h1 160
5	Dia D1	185	h2 180
6	Dia D2	165	L 476
7	Dia DNA	65	m1 100
8	Dia DNM	50	m2 70
9	Dia f1	18	n1 265
10	Dia f2	18	n2 212
11	Dia K1	145	s 14
12	Dia K2	125	Weight P&M 39 kg
13	Dia n1	4	
14	Dia n2	4	
15	Dia P1	122	

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Construction

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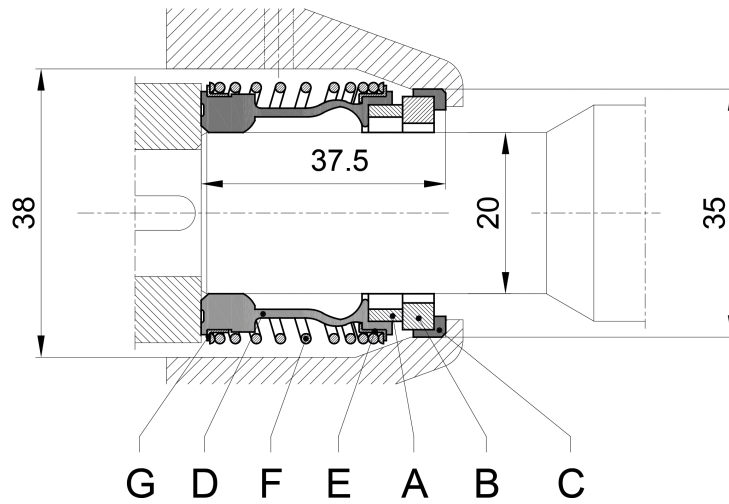
N°	PART NAME	MATERIAL	Q.TY
1111	Pump casing	EN-GJL-200	1
1340	Latern-Cover	EN-GJL-200	1
2200	Impeller	EN-GJL-200	1
2540	Baffle	NB 70	1
2912	Impeller nut	6.8-ZN	1
3134	Support foot	S235JR	1
4200	Mechanical seal	Sic/Sic/NBR/AISI 304	1
4590	Gasket	AF 1600	1
6511	Refil plug	EN GJMB-350-10	1
6515	Drain plug	EN GJMB-350-10	1
6576.1	Hexagonal head screw	8.8-ZN	4
6576.2	Hexagonal head screw	8.8-ZN	8
6576.3	Hexagonal head screw	8.8-ZN	1
6710	Key	C50	1
6855.1	Impeller washer	R40-ZN	1
6855.2	Washer	R40-ZN	8
8020	Motor		1

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Ref.	Name	Material
A	Rotary seal ring	Carbon
B	Stationary seal ring	Silicon Carbide
C	Gasket	EPDM
D	Bellows	EPDM
E	Spring plate	AISI 304
F	Spring	AISI 304
G	Spring plate	AISI 304