

# Technical Data

Pump Name

MATRIX 18-3T6/4.0

Customer	Date	2024-07-02	Company
Contact	Item no.		Issued by
Phone	Project		Phone
E-mail	Project ID	Proiect redenumit 2024-07-02 22:34:28	E-mail

## Requested data

1	Pump type	HORIZONTAL MULTISTAGE 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	MATRIX 18-3T6/4.0	Frequency	Hz	60	
10	Design	HORIZONTAL MULTISTAGE PUMPS	Installation type		STANDARD	
11	Manufacturer	EBARA	Impeller Diameter	Max.	mm	
12	Speed	rpm		3500	Designed	mm
13	No. of Stage	3		Min.	mm	107
14	Connection	Suction side	UNI ISO 228	Flow	Operating	m³/h
15	Connection	Discharge side	UNI ISO 228		Max-	m³/h
16	Max Working Pressure	bar	10		Min-	m³/h
17	Shut-off head	bar	5.08	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	3.51	
21	Required pump NPSH	m	Efficiency	%		

## Materials

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

## Motor

28	Manufacturer	EPE Standard	Insulation class	F	
29	Type	TEFC_MATRIX 18-3T6/4.0_460_Three Phase	Phases	3~	
30	Specific design	IE3 / 60 Hz / Pole pairs 1	Frame size		
31	Rated power	kW	4	Weight	kg
32	Number of poles	2	Electric voltage	V	460
33	Speed	rpm	3500	Electric current	A
34	Degree of protection	IP 55			
35					

## Remarks

# Performance Curve

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## Requested data

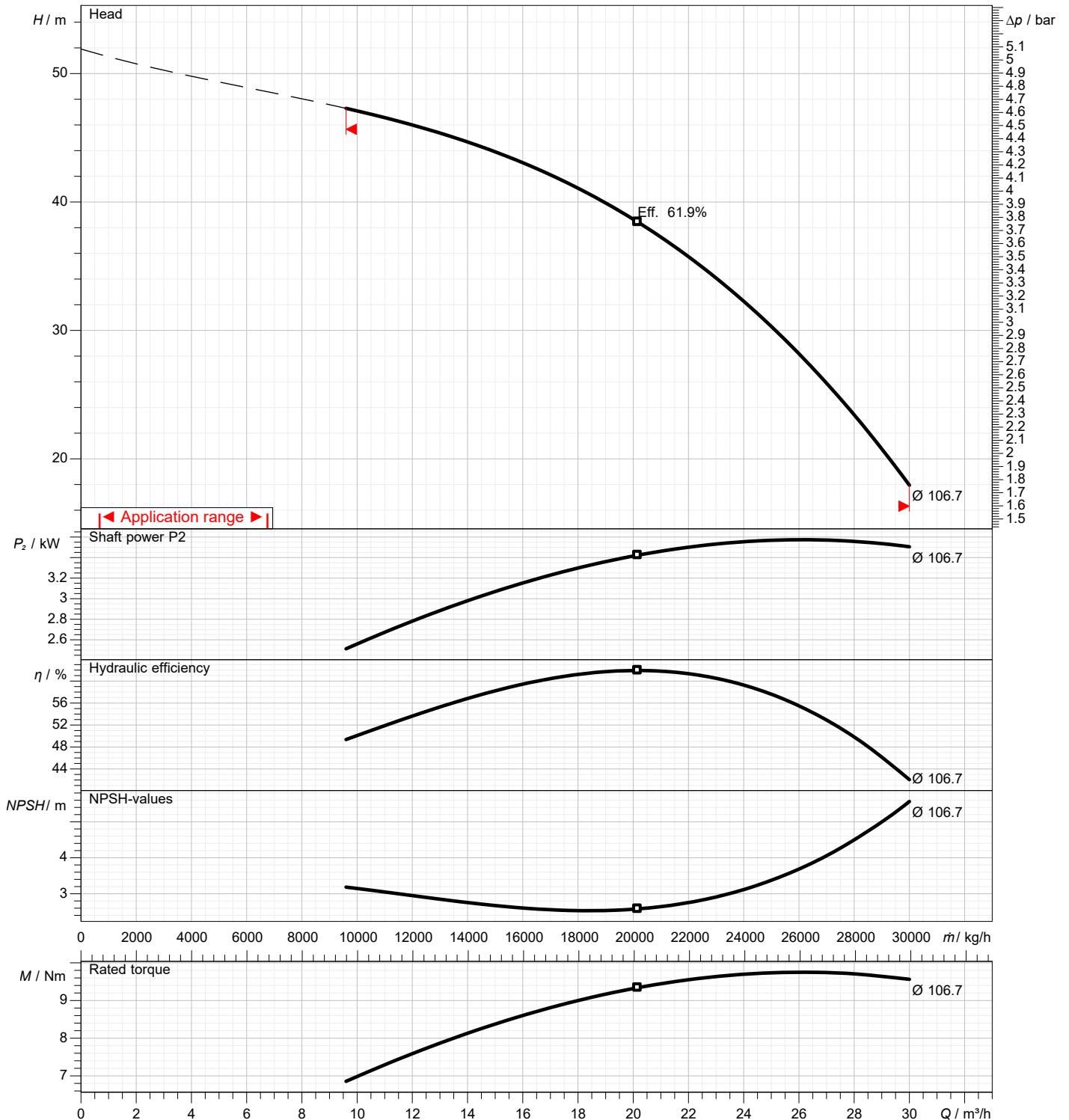
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

## Pump

Operating flow	m³/h		Frequency	Hz	60
Operating head	m		Number of poles		2
Impeller diameter designed	mm	107	Speed	rpm	3500

Test standard: ISO 9906:2012 - Grade3B

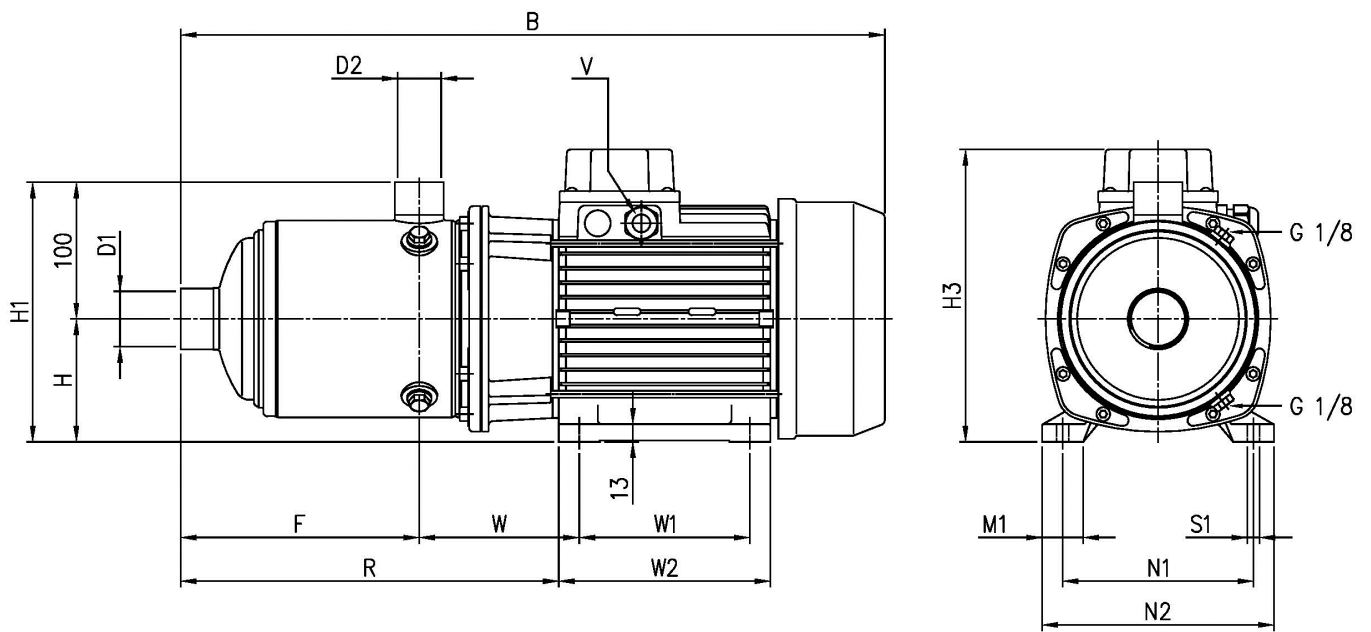
Water; 20°C; 998.3kg/m³; 1mm²/s



# Dimensions

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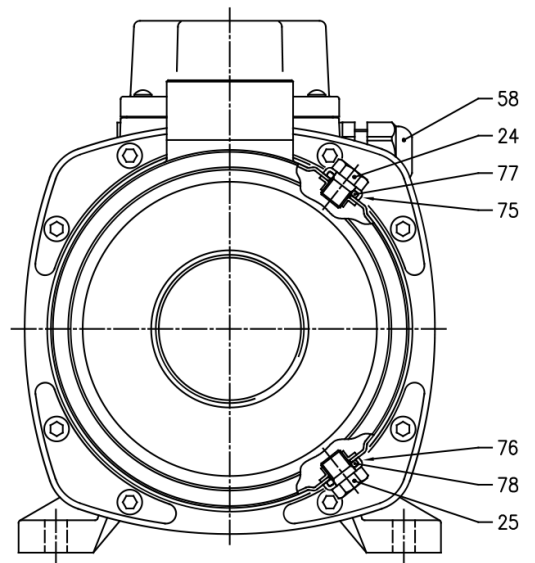
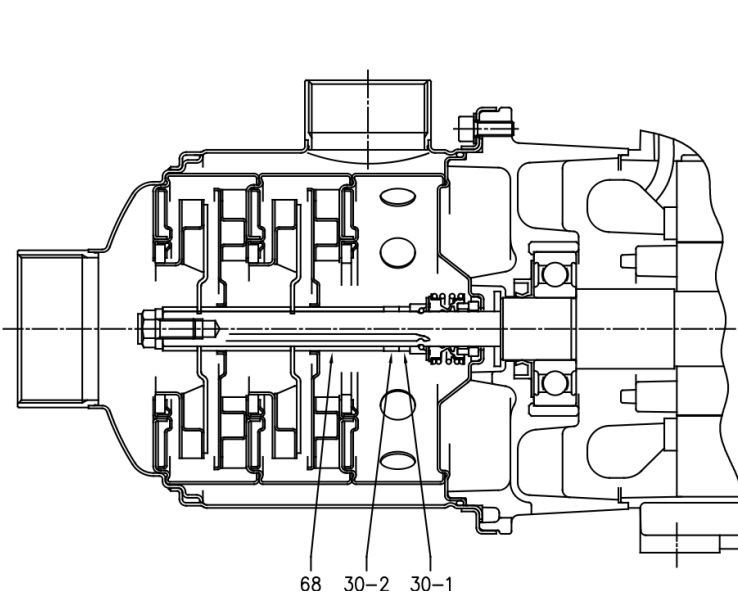
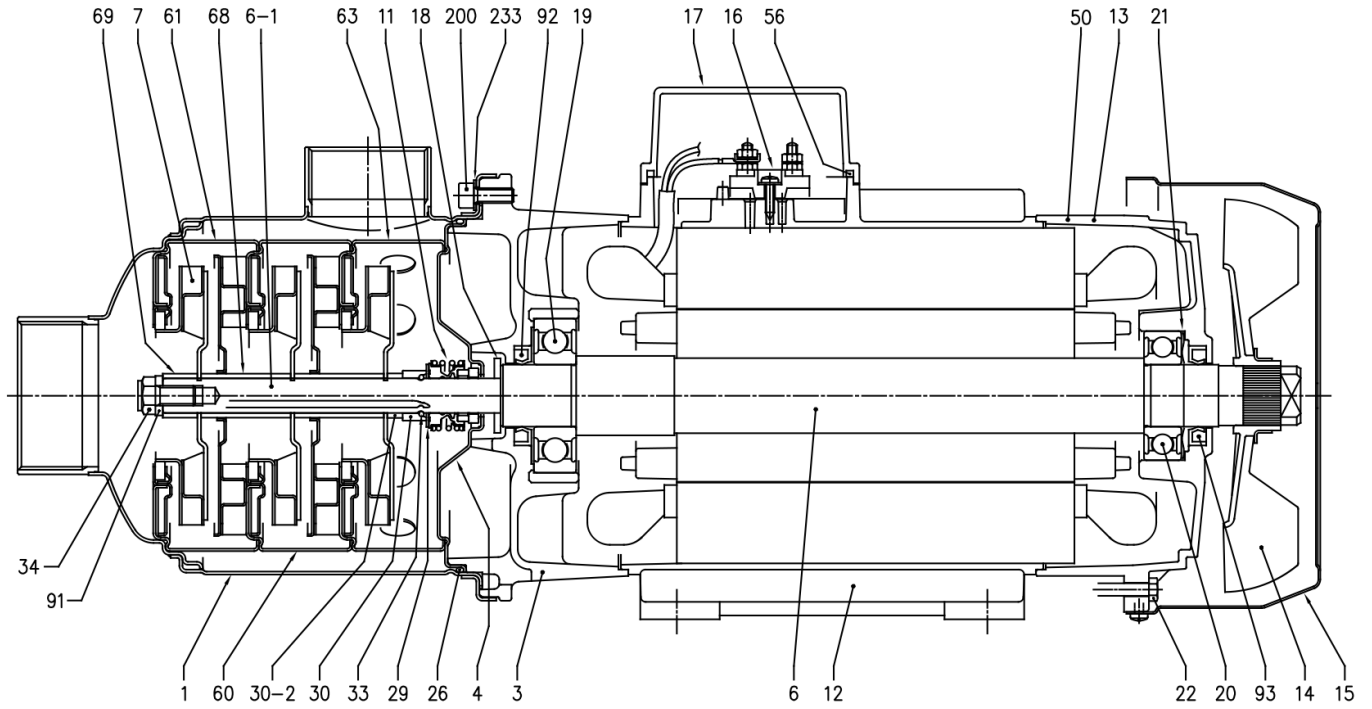
Dimensions in		mm						
1	B	540	W2	170				
2	Dia D1	2"	Weight P&M	25,4 kg				
3	Dia D2	1" 1/2						
4	F	141						
5	H	100						
6	H1	200						
7	H3	241						
8	M1	35						
9	N1	160						
10	N2	192						
11	R	240						
12	S1	11						
13	V	M20X1,5						
14	W	111						
15	W1	140						

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**(2/4)****Construction****Pump name** MATRIX 18-3T6/4.0

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N°	PART NAME	MATERIAL	DIMENSION	STANDARD	Q.TY
1	Casing	EN 1.4301 (AISI 304)			1
3	Bracket	EN AB-AISI11Cu2(Fe)			1
4	Casing cover	EN 1.4301 (AISI 304)			1
6	Shaft with rotor	-			1
6-1	Pump Shaft	EN 1.4301 (AISI 304)			1
7	Impeller	EN 1.4301 (AISI 304)			[1]
11	Mechanical seal [4]	Carbon/Ceramic/EPDM			1
12	Motor frame with stator	-			1
13	Motor cover	Aluminium			1
14	Fan	PA6			1
15	Fan cover	Fe P04 Zinc-coated			1
16	Terminal board	-			1
17	Terminal box cover [2]	Aluminium			1
18	Splash ring	NBR	30x13.5x2.5		1
19	Bearing	-			1
20	Bearing	-			1
21	Adjusting ring	Steel C70			1
22	Tie rod	Fe 42 Zinc-coated			4
24	Plug	EN 1.4301 (AISI 304)			1
25	Plug	EN 1.4301 (AISI 304)			1
26	O-ring	EPDM	133.02X2.62		1
29	Washer	EN 1.4301 (AISI 304)	25.1x14x1		1
30	Ring holder	EN 1.4301 (AISI 304)			1
30-1	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)			[1]
30-2	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)			[1]
33	Ring	EN 1.4301 (AISI 304)			2
34	Screw	EN 1.4301 (AISI 304)	M 8x16	UNI 5739	1
50	Motor spacer [3]	Aluminium			1
56	Box gasket	NBR			1
58	Ring nut	-			1
60	Intermediate casing	EN 1.4301 (AISI 304)+PPS			[1]
61	Intermediate casing (suction)	EN 1.4301 (AISI 304)+PPS			1
63	Intermediate casing (discharge)	EN 1.4301 (AISI 304)+PPS			1
68	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)			[1]
69	Impeller spacer	EN 1.4301 (AISI 304)			1
75	Washer (plug)	EN 1.4301 (AISI 304)			1
76	Washer (plug)	EN 1.4301 (AISI 304)			1
77	O-ring	EPDM	9.19x2.62		1
78	O-ring	EPDM	9.19x2.62		1
91	Shaft washer	EN 1.4301 (AISI 304)			1
92	Lip seal	0.65-0.75-0.9 kW	17x32x6		1
		1.3-1.5-2.2 kW	20x30x4		1
		3.0-4.0 kW	25x40x7		1
93	Lip seal	0.65-0.75-0.9 kW	15x30x5		1
		1.3-1.5-2.2 kW	17x32x7		1
		3.0-4.0 kW	25x40x7		1
200	Screw	EN 1.4301 (AISI 304)	M6x16	UNI 5931	8
233	Plate	EN 1.4301 (AISI 304)			4

[1] See **CONSTRUCTION 3**

[2] Only for three phase

[3] Only for 10-5T6/4 and 18-3T6/4

[4] See **CONSTRUCTION 4**

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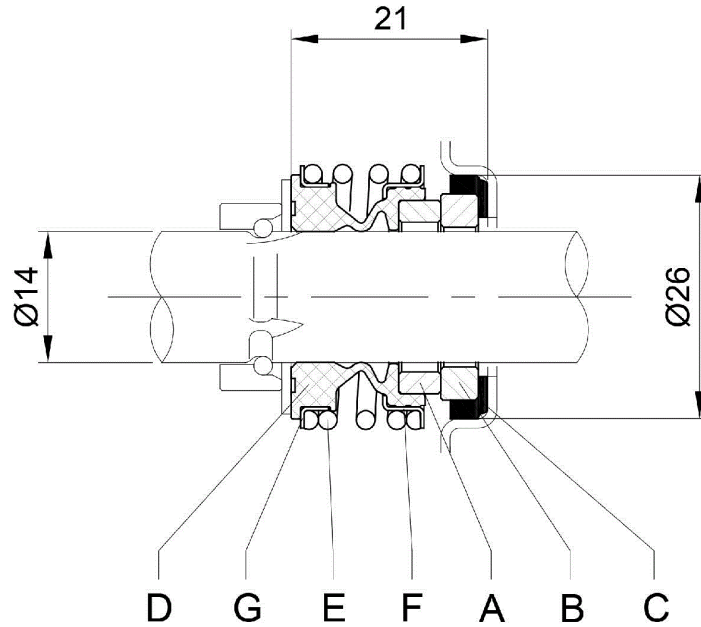
Pump type	N° 7 Impeller	N° 30-1 Shaft sleeve (adjustment)	N° 30-2 Shaft sleeve (adjustment)	N° 42 Foot	N° 60 Intermediate casing	N° 68 Shaft sleeve (intermediate)	N° 90 Cover box gasket	N° 201 Screw	N° 230 Washer
MATRIX 18-2T6/3	3	1	1	-	1	2	-	-	-
MATRIX 18-3T6/4	4	-	1	-	1	2	-	-	-

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A	B	C	D	E	F	G
Rotary seal ring	Stationary seal ring	Gasket	Bellows	Spring	Frame	Retainer ring
Carbon	Ceramic	EPDM	EPDM	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)