

Technical Data

Pump Name

50 DS 51.5

Customer	Date	2024-06-13	Company
Contact	Item no.		Issued by
Phone	Project		Phone
E-mail	Project ID	Proiect redenumit 2024-06-13 18:03:05	E-mail

Requested data

1	Pump type		SUBMERSIBLE SUMP PUMP	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		50 DS 51.5	Frequency	Hz	50	
10	Design		SUBMERSIBLE SUMP PUMP	Installation type		STANDARD	
11	Manufacturer		EBARA	Impeller Diameter	Max.	mm	142
12	Speed	rpm	2900		Designed	mm	142
13	No. of Stage		1		Min.	mm	142
14	Connection	Suction side		Flow	Operating	m³/h	
15	Connection	Discharge side			Max-	m³/h	27
16	Max Working Pressure	bar			Min-	m³/h	1.8
17	Shut-off head	bar	2.36	Head	Operating	m	
18	Total weight	kg	See the table of "Dimensions".		- (Qmax.)	m	5.4
19	Shaft power	kW			- (Qmin.)	m	23.6
20				Max. Shaft Power at max. impeller	kW	1.40	
21	Required pump NPSH	m		Efficiency	%		

Materials

22	Casing		FC200	Mechanical seal (Upper)		Carbon/Ceramic
23	Impeller		FC200	Mechanical seal (Lower)		SiC/SiC
24	Suction Cover		SUS304	Lubricating Oil		Turbine Oil VG32
25	Strainer		SPCC			
26	Shaft		SUS403			
27	Motor frame		FC150			

Motor

28	Manufacturer		--	Insulation class		F
29	Type		DS 51.5_380_Three Phase	Phases		3~
30	Specific design		Submersible dry type / 50 Hz / Pole pairs 1	Frame size		
31	Rated power	kW	1.5	Weight	kg	
32	Number of poles		2	Electric voltage	V	380
33	Speed	rpm	2821	Electric current	A	3.7
34	Degree of protection		IP 68			
35						

Remarks

Performance Curve

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Requested data

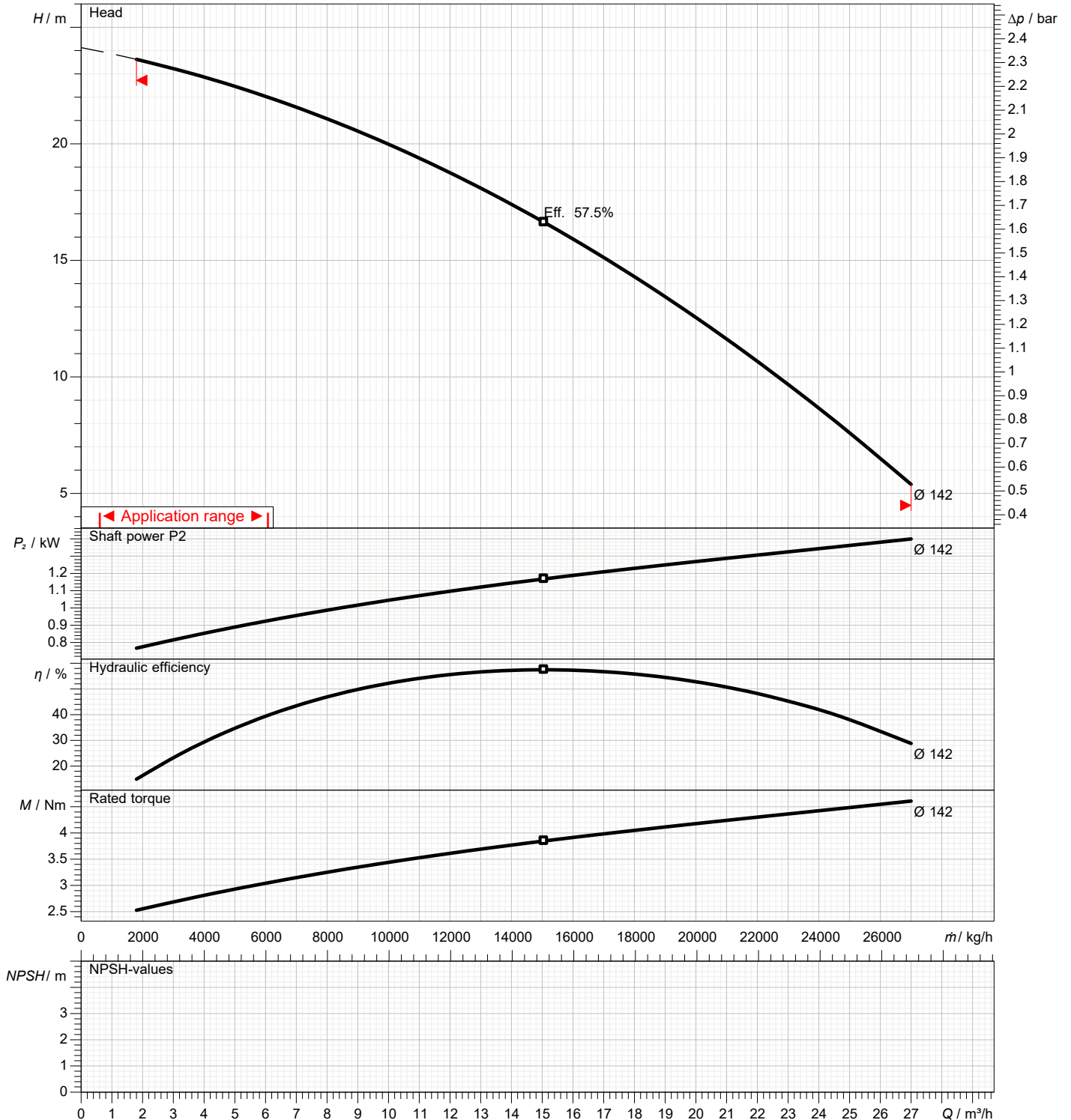
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

Pump

Operating flow	m³/h		Frequency	Hz	50
Operating head	m		Number of poles		2
Impeller diameter designed	mm	142	Speed	rpm	2900

Test standard: ISO 9906:2012 - Grade3B

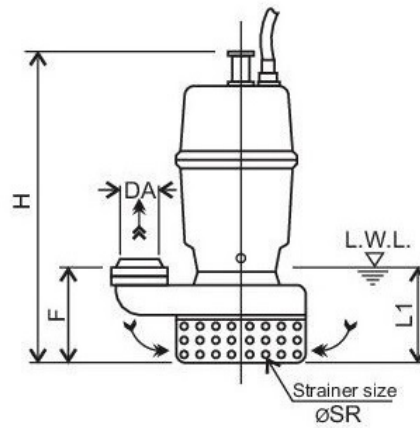
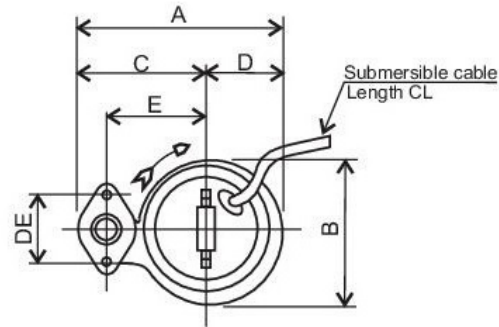
Water; 20°C; 998.3kg/m³; 1mm²/s



Dimensions

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Note:

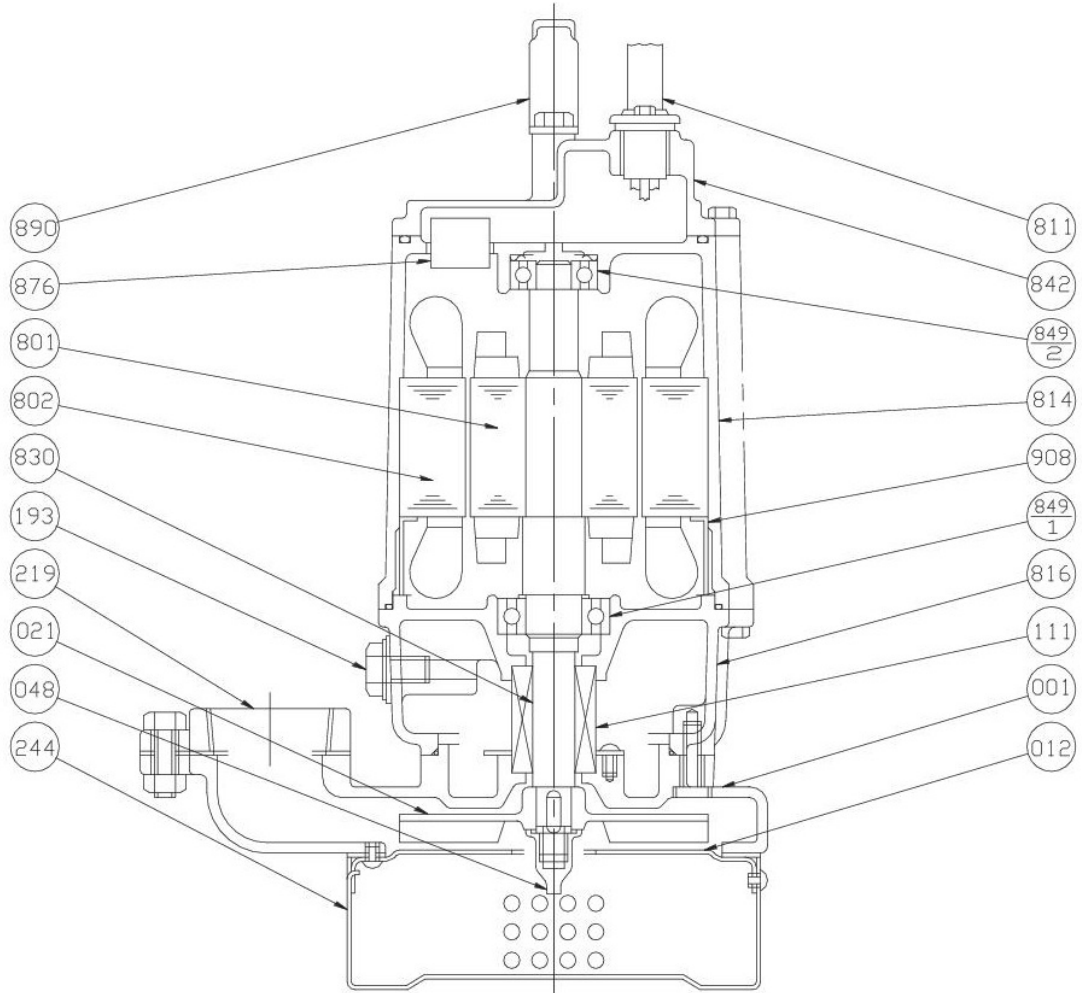
- 1/. IT IS LIMITED TO OPERATE AT LOW WATER LEVEL WITHIN 10 MINUTES.
- 2/. IT IS LIMITED TO OPERATE BELOW WATER LEVEL AT MOTOR TOP WITHIN 30 MINUTES.

Dimensions in		mm						
1	A	266						
2	B	200						
3	C	168						
4	CL	6m						
5	D	98						
6	DA	Rc2"						
7	DE	96						
8	E	130						
9	F	115						
10	H	450						
11	L1	120						
12	SR	10						
13	Weight kg	25						
14								
15								

Construction

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Item Number	Description	Material	Quantity per unit
001	Pump Casing	FC200 Cast iron	1
012	Suction Cover	SUS304 Stainless Steel	1
021	Impeller	FC200 Cast iron	1
048	Impeller Nut	C3771 Brass	1
111	Mechanical Seal		1
193	Oil Plug	C3604 or SUS Brass or Stainless Steel	1
219	Companion Flange	FC200 Cast iron	1
244	Strainer	SPCC Steel	1
801	Rotor		1
802	Stator		1

Item Number	Description	Material	Quantity per unit
811	Submersible Cable		1
814	Motor Frame	FC150 Cast Iron	1
816	Power Side Bracket	FC150 Cast Iron	1
830	Shaft	SUS403 Stainless Steel	1
842	Motor Cover	FC150 Cast Iron	1
849-1	Ball Bearing		1
849-2	Ball Bearing		1
876	Protector		1
890	Handle	SUS Stainless Steel	1
908	Spacer	SS Steel	1