

# Technical Data

Pump Name

80 DL 53.7 with Cutter

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

## Requested data

1	Pump type		SUBMERSIBLE SEWAGE 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	80 DL 53.7 with Cutter	Frequency	Hz	50			
10	Design	SUBMERSIBLE SEWAGE PUMPS	Installation type		STANDARD			
11	Manufacturer	EBARA	Impeller Diameter	Max.	mm	242		
12	Speed	rpm		1430	Designed	mm	242	
13	No. of Stage	1		Min.	mm	242		
14	Connection	Suction side	Flow	Operating	m³/h			
15	Connection	Discharge side		JIS	10K	Max-	m³/h	72
16	Max Working Pressure	bar			Min-	m³/h	6	
17	Shut-off head	bar	1.81	Head	Operating	m		
18	Total weight	kg	See the table of "Dimensions".		- (Qmax.)	m	10.4	
19	Shaft power	kW			- (Qmin.)	m	18.7	
20				Max. Shaft Power at max. impeller	kW	3.68		
21	Required pump NPSH	m		Efficiency	%			

## Materials

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

## Motor

28	Manufacturer	--	Insulation class	F		
29	Type	DL 53.7_380_Three phase	Phases	3~		
30	Specific design	Submersible dry type / 50 Hz / Pole pairs 2	Frame size			
31	Rated power	kW	3.7	Weight	kg	
32	Number of poles	4	Electric voltage	V	380	
33	Speed	rpm	1427	Electric current	A	8.4
34	Degree of protection	IP68				
35						

## Remarks

# Performance Curve

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### Requested data

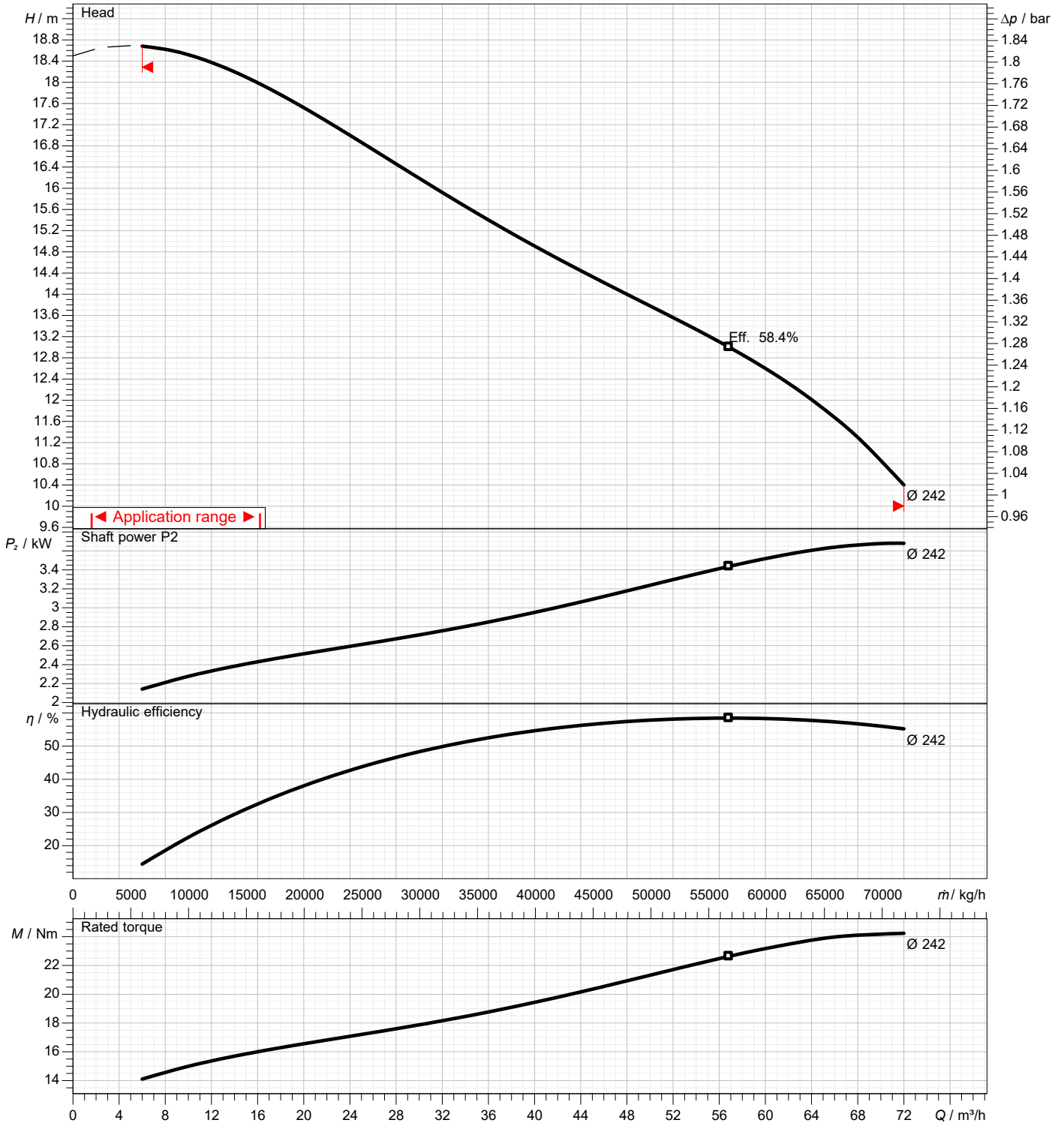
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

### Pump

Operating flow	m³/h		Frequency	Hz	50
Operating head	m		Number of poles		4
Impeller diameter designed	mm	242	Speed	rpm	1450

Test standard: ISO 9906:2012 - Grade3B

Water; 20°C; 998.3kg/m³; 0mm²/s

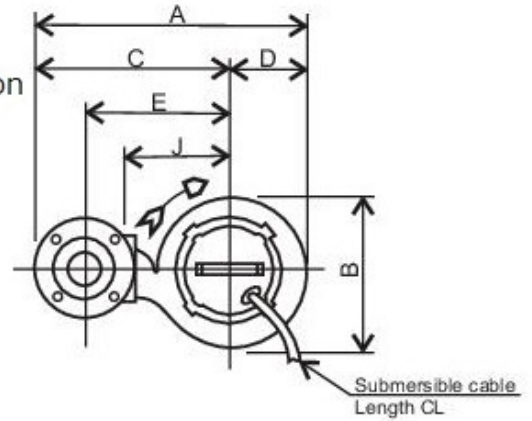
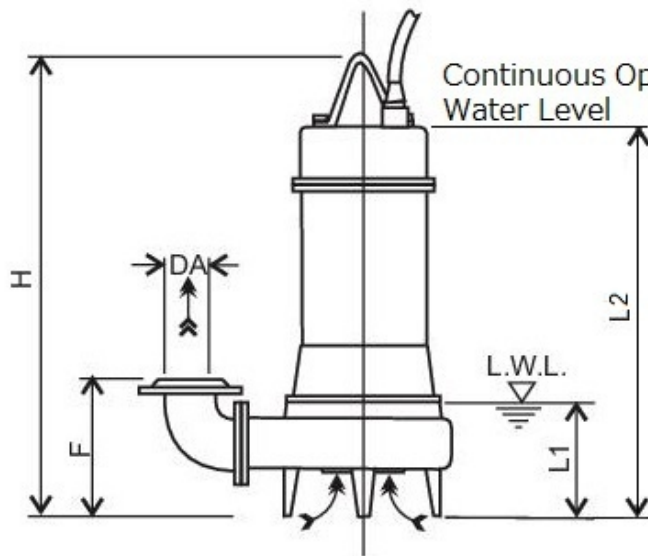


# Dimensions

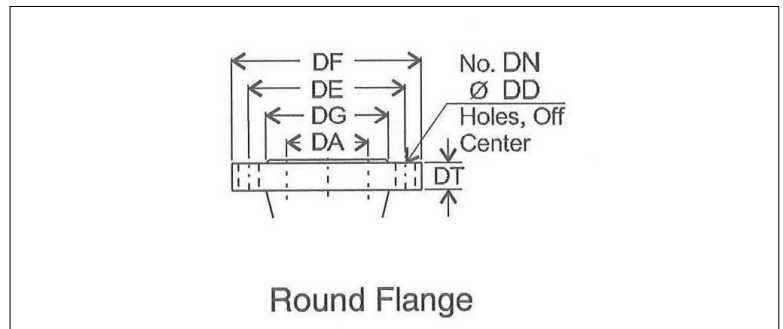
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- Note:
- 1/. Operation is limited to 10 minutes at L.W.L.(Low Water Level).
  - 2/. Operation is limited 30 minutes with water level below top of motor



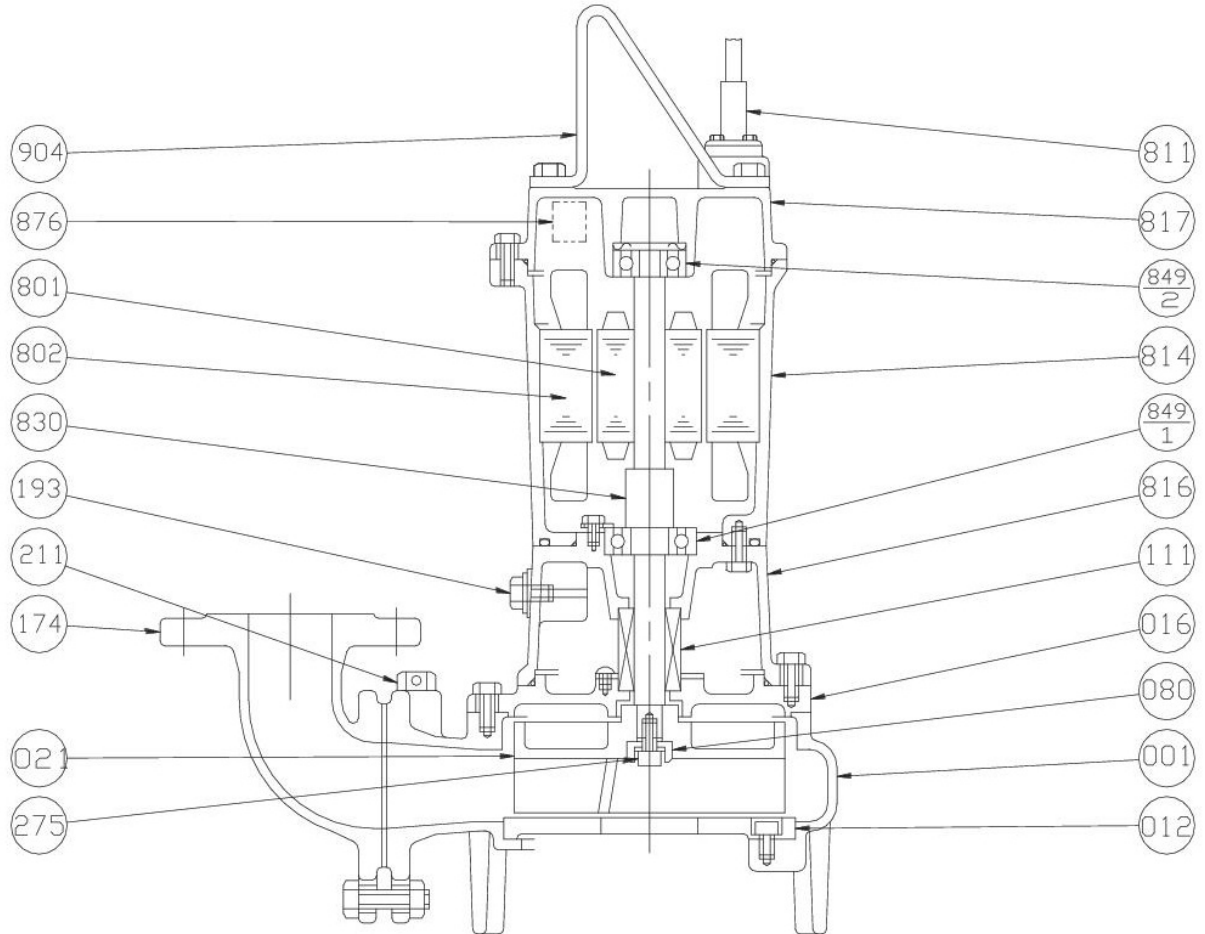
Pump dimensions		mm		Suction side		mm		Discharge side		mm	
A	567					DA	80				
B	328					DD	15				
C	403					DE	150				
CL	10m					DF	185				
D	164					DG	126				
E	310					DN	8 (Num)				
F	220					DT	18				
H	687										
J	235										
L1	165										
L2	587										

# Construction

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Item Number	Description	Material	Quantity per unit
001	Pump Casing	FC200 Cast iron	1
012	Suction Cover	FC200 Cast iron	1
016	Mechanical Seal Cover	FC200 Cast iron	1
021	Impeller	FC200 Cast iron	1
080	Bushing	SS Steel	1
111	Mechanical Seal		1
174	Discharge Bend	FC200 Cast iron	1
193	Oil Plug	C3604 or SUS304 Brass or 304 Stainless Steel	1
211	Airvent Valve	C3604 Brass	1
275	Impeller Bolt	SUS304 Stainless Steel	1

Item Number	Description	Material	Quantity per unit
801	Rotor		1
802	Stator		1
811	Submersible Cable		1
814	Motor Frame	FC150 Cast Iron	1
816	Power Side Bracket	FC150 Cast Iron	1
817	Opposite Side Bracket	FC150 Cast Iron	1
830	Shaft	SUS403 Stainless Steel	1
849-1	Ball Bearing		1
849-2	Ball Bearing		1
876	Protector		1
904	Lifting Hanger	SS Steel	1