

Technical data

Pump name WY8BHE 77-12/45 FRK

Customer	Date	2024-06-13	Company
Contact	Item no.		Issued by
Phone	Project		Phone
E-mail	Project ID	Proiect redenumit 2024-06-13 09:28:44	E-mail

Requested data

1	Pump type	SUBMERSIBLE DEEPWELL 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	WY8BHE 77-12/45 FRK	Frequency	Hz 50
10	Design	SUBMERSIBLE DEEPWELL PUMPS	Installation type	Franklin Motor 8"
11	Manufacturer	EBARA	Impeller Diameter	Max. mm 0
12	Speed	rpm 2900		Designed mm
13	No. of Stage	12		Min. mm 0
14	Connection	Suction side	Flow	Operating m³/h
15	Connection	Discharge side		Max- m³/h 100
16	Max Working Pressure	bar 70		Min- m³/h 30
17	Shut-off head	bar 24.39	Head	Operating m
18	Total weight	kg See the table of "Dimensions".		- (Qmax.) m 113.6
19	Shaft power	kW		- (Qmin.) m 236.2
20	Max. fluid temperature	°C 40	Max. Shaft Power at max. impeller	kW 42.43
21	Required pump NPSH	m	Efficiency	%

Materials

22	Impeller	EN 1.4401 (AISI 316)	
23	Discharge casing	EN 1.4301 (AISI 304)	
24	Shaft	EN 1.4301 (AISI 329)	
25	Diffuser	EN 1.4301 (AISI 304)	
26			
27			

Motor

28	Manufacturer	FRANKLIN	Insulation class	F
29	Type	8" 8BHE 77-12/45_380_Three Phase	Phases	3~
30	Specific design	Submersible water filled type / 50 Hz / Pole pairs 1	Frame size	8"
31	Rated power	kW 45	Weight	kg 172
32	Number of poles	2	Electric voltage	V 380
33	Speed	rpm 2910	Electric current	A 89
34	Degree of protection	IP 68		
35				

Remarks

Performance Curve

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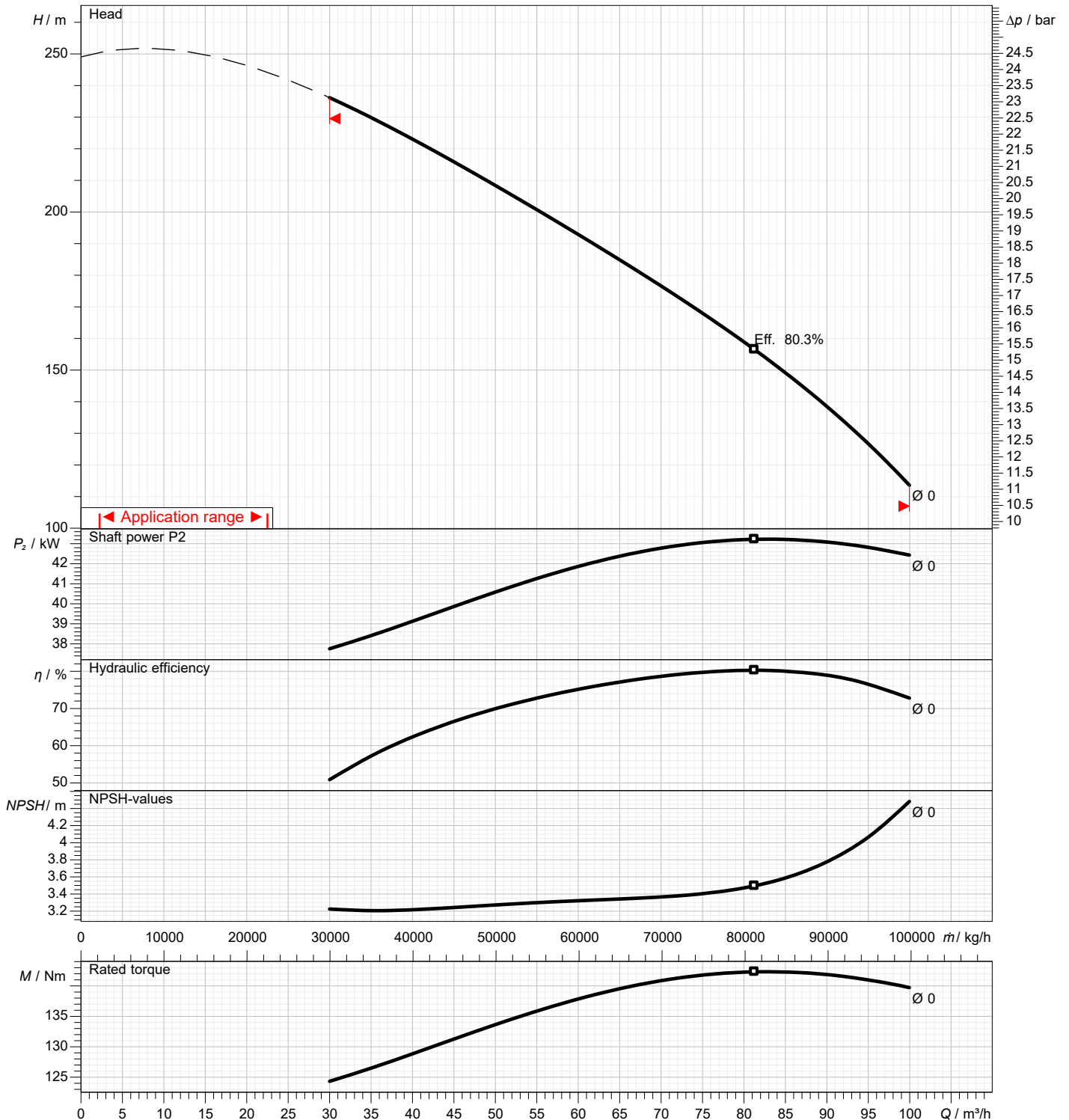
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

Pump

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

Test standard: ISO 9906:2012 - Grade3B

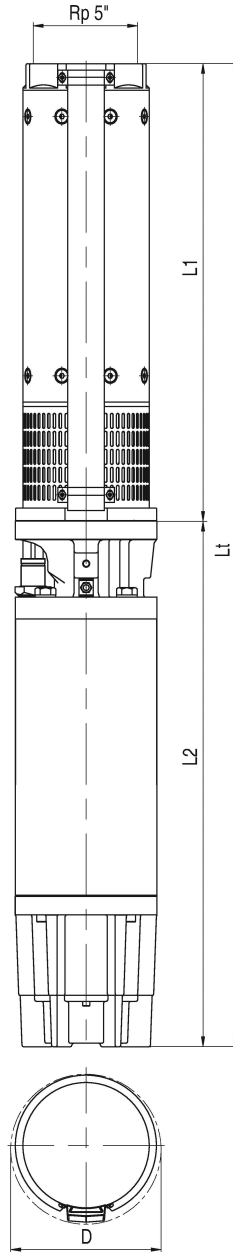
Water; 20°C; 998.3kg/m³; 1mm²/s



Dimensions

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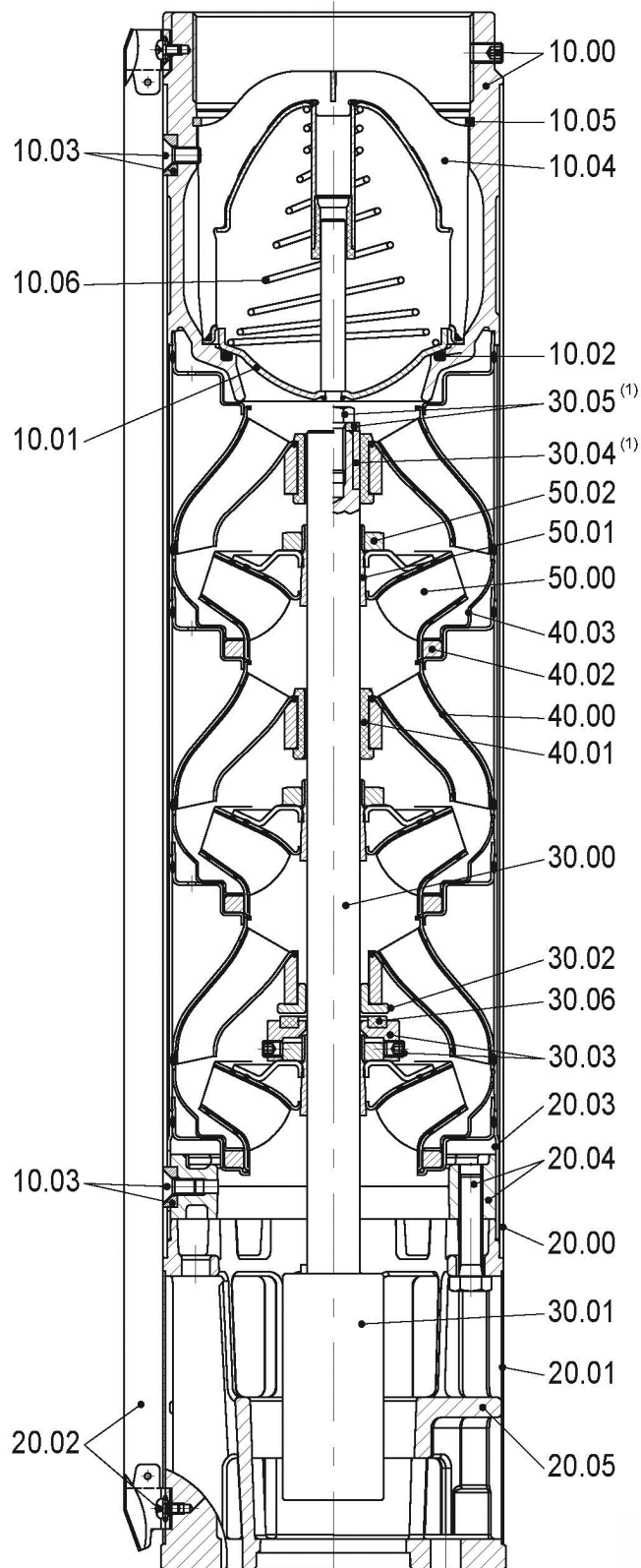
Dimensions in		mm						
1	D 1 CABLE	200						
2	D 2 CABLE	202						
3	L1	1909						
4	L2	1077						
5	L3	2986						
6	Weight P&M	426 kg						
7								
8								
9								
10								
11								
12								
13								
14								
15								

(1/2)

Construction

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(2/2)

Construction

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N°	NAME	MATERIAL Standard version
10.00	Discharge head	EN 1.4301 (AISI 304)
10.01	Valve	EN 1.4401 (AISI 316)
10.02	Sealing O-ring	NBR
10.03	Outer case locking nuts	EN 1.4401 (AISI 316)
10.04	Valve support	EN 1.4401 (AISI 316)
10.05	Seeger ring	EN 1.4401 (AISI 316)
10.06	Spring	EN 1.4401 (AISI 316)
20.00	Outer case	EN 1.4301 (AISI 304)
20.01	Suction strainer	EN 1.4401 (AISI 316)
20.02	Cable guard	EN 1.4401 (AISI 316)
20.03	Initial spacer	EN 1.4401 (AISI 316)
20.04	Flange	EN 1.4301 (AISI 304)
20.05	Motor adapter	EN 1.4301 (AISI 304)
30.00	Pump shaft	EN 1.4460 (AISI 329)
30.01	Coupling	EN 1.4057 (AISI 431) + EN 1.4460 (AISI 329)
30.02	Upper up-thrust washer	EN 1.4460 (AISI 329)
30.03	Lower up-thrust washer	EN 1.4460 (AISI 329)
30.04	Upper journal sleeve [1]	Stainless steel with ceramic casting
30.05	Screw and washer [1]	EN 1.4401 (AISI 316)
30.06	Up-thrust ring	PTFE + Graphite
40.00	Diffuser	EN 1.4301 (AISI 304)
40.01	Secondary bearing bush	NBR
40.02	Floating neck ring	PTFE
40.03	Flange clamping neck ring	EN 1.4401 (AISI 316)
50.00	Impeller	EN 1.4401 (AISI 316)
50.01	Split cone	EN 1.4401 (AISI 316)
50.02	Split cone nut	EN 1.4401 (AISI 316)

[1] only for types with more than 8 stages