Contact
E-mail
Phone

Customer

Contact
E-mail
Phone

Technical data

D 1800 - 1

With motor
NU 121-4/120

Project ID Untitled project 2025-03-17 02:22:49.253
Project name
Installation location
Customer pos. No.

Date 2025-03-17

Operating data specification

Pumped fluid	Water
Operating temperature t A	20
pH at t A	
Density at t A	998.3 kg/m³
Kin. viscosity at t A	1.005 mm²/s
Rated frequency	50
Rated flow	
Rated head	
Geodetic head	
Max. inlet pressure	0 kPa
Installation type	Vertical installation

Duty point data

Volume flow		
Head		
Shaft power P2	P_2	
Hydr. efficiency η hyd.		
Power input P1	P_1	
Required pump NPSH		
Rotational speed		1453 1/min

Pump

Make	WILO
Pump type	D 1800
Frame size	24" (Ø568 - Ø587)
Sense of rotation	Counter clockwise
Max. operating pressure	4.5 bar
Stages	1
Impeller type	Semi axial impeller
Shut off head	46.4 m
Max. shaft power	155 kW
Weight of unit (without detachable Accessories)	1112 kg

Discharge port

Pressure rating	PN 10
Rated diameter	DN 350
Standard	EN 1092-2

Impeller Ø

Max.	380 mm
Min.	323 mm
designed	380 mm

According to IEC 60034-1
No test norm defined for this product

Flow

Referring to: Speed in operating point

Nominal	343 l/s
Max-	431 l/s
Min-	111 l/s

Motor

Referring to: Rated speed

Manufacturer / Type	NU 121-4/120
Specific design	NU (glycol filling)
Rated power	168 kW
Electric voltage	400 V
Power input with rated power	189 kW
Current input with rated power	341 A
Number of poles	4
Rated speed	1447 1/min
Load	125 / 100 / 75 / 50 / 25 %
cos phi	0.81/0.8/0.75/0.64/0.43
cos phi with starting	
Efficiency	85.5/88.9/88.3/83.9/76
Operation type (VDE 0530)	S1 immersed
Max. fluid temperature	30
Min. flow velocity	0.1
Starting curr. d-o-l/ YD	1,920 A/ 640 A
Starting torque	1620 Nm
Inertia moment	0.655 kg m²
Starts per hour max.	10
Degree of protection	IP 68
Weight of motor	689 kg
Motor connection cable	6X 1X50 + 1X50 S07BB

Application limits for operation with frequency inverter:
- Max. voltage rise: 500 V/µs
- Max. overvoltage (phase - phase): 1000 V

Pump materials - Material design A

Suction piece	EN-GJL-250
Stage- /guide casing	EN-GJL-250
Impeller	G-Cu Sn10
Stationary wear ring	1.4580
Pump shaft	1.4021
Shaft sleeve	1.4021
Pump end bearing	Brass + NBR
Connecting screws	A 2 - 70
Nuts	A 2 - 70

Motor materials

Material version:	A
Shaft sealing:	Mechanical seal
Stator tube:	St
Upper bearing housing:	EN - GJL 200
Lower bearing housing:	EN - GJL 200
Lower part:	EN - GJL 200
Shaft journal:	1.4462
Rubber parts:	EPDM
Screws and nuts:	A2 - 70

Contact
E-mail
Phone

Customer

Contact
E-mail
Phone

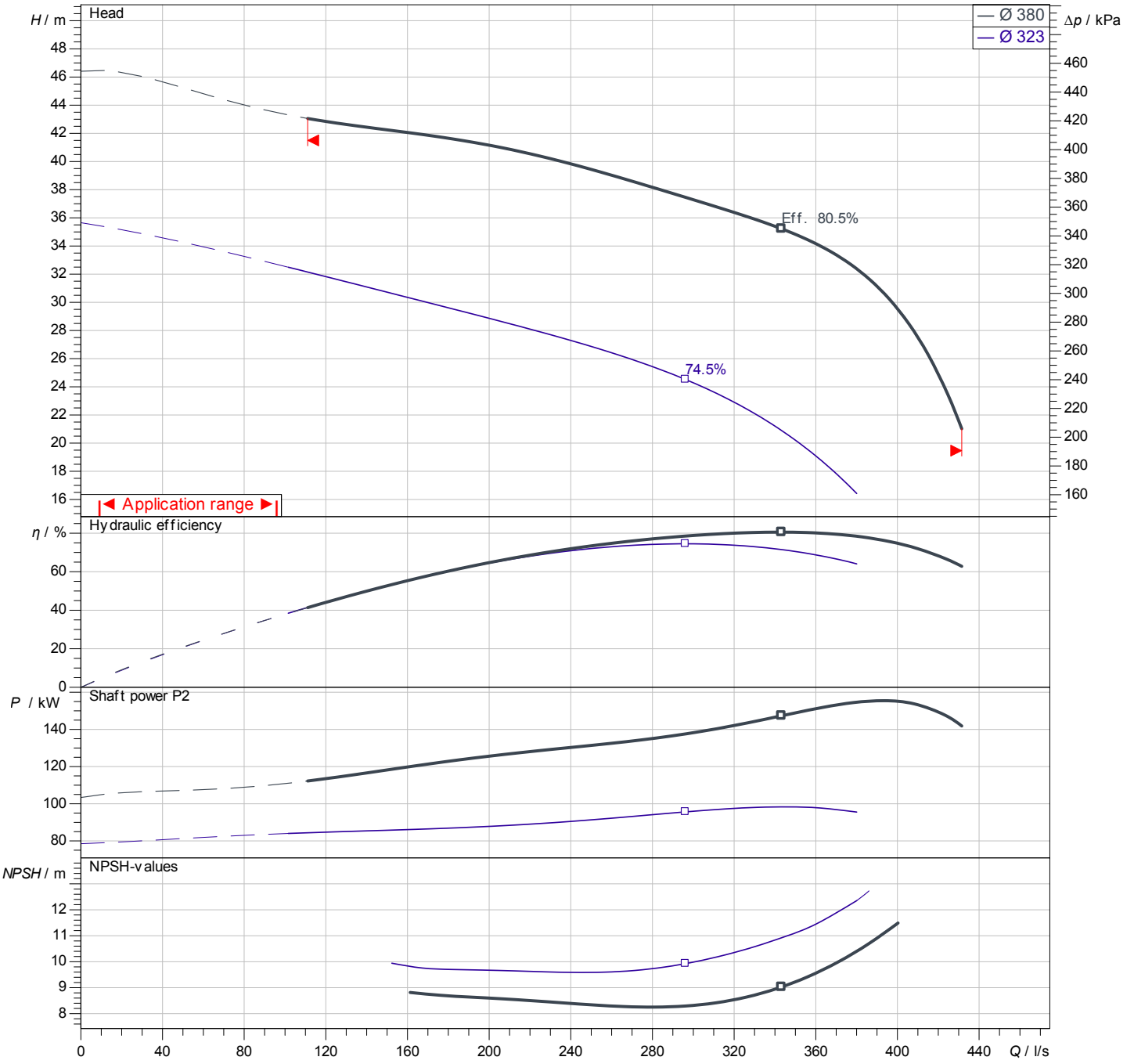
Technical data

D 1800 - 1

With motor
NU 121-4/120

Project ID Untitled project 2025-03-17 02:22:49.253
Project name
Installation location
Customer pos. No.

Date 2025-03-17



Pump

Stages		1
Impeller Ø	designed	380 mm
Nominal speed		1,400 1/min
Frequency		50 Hz
Impeller type		Semi axial impeller

Motor

Rated power	168 kW
Sel. explosion protection	

Duty point data

Volume flow		
Head		
Shaft power P2	P_2	
Hydr. efficiency η hyd.		
Power input P1	P_1	
Required pump NPSH		
Rotational speed		1453 1/min

Subject to change

Contact
E-mail
Phone

Customer

Contact
E-mail
Phone

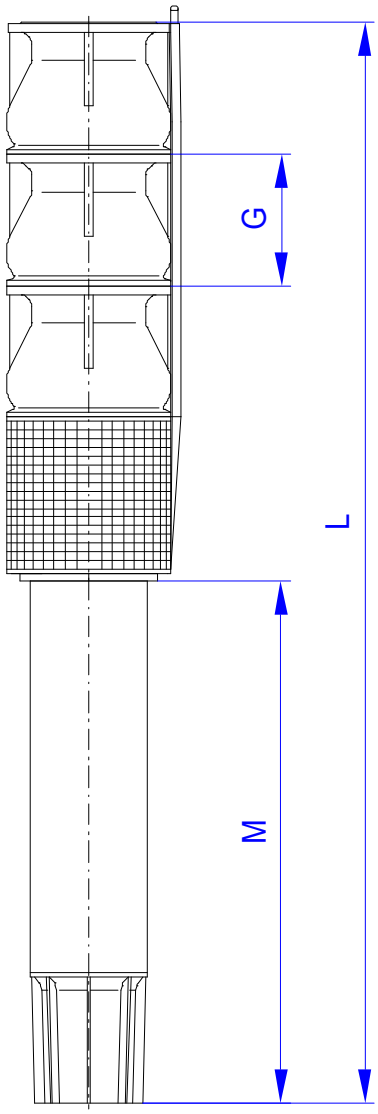
Technical data

D 1800 - 1

With motor
NU 121-4/120

Project ID Untitled project 2025-03-17 02:22:49.253
Project name
Installation location
Customer pos. No.

Date 2025-03-17



Dimensions

Name	Value	Name	Value
G	420 mm		
L	3,183 mm		
M	2,230 mm		

Connections

Discharge port	DN 350 PN 10 PN 10
Intake piece	
Non-return valves	no