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## Technical data

### Offshore K 105 - 1

With motor

### NU 611T-2/22-o

Project ID Untitled project 2025-03-03 23:00:00.495  
Project name  
Installation location  
Customer pos. No.

Date 2025-03-04

#### Operating data specification

Pumped fluid	Water
Operating temperature t A	20
pH at t A	
Density at t A	998.3 kg/m <sup>3</sup>
Kin. viscosity at t A	1.005 mm <sup>2</sup> /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 P <sub>2</sub>	P <sub>2</sub>
Hydr. efficiency η <sub>hyd.</sub>	
Power input P <sub>1</sub>	P <sub>1</sub>
Required pump NPSH	
Rotational speed	2861 1/min

#### Pump

Make	WILO
Pump type	Offshore K 105
Frame size	10" (Ø238 - Ø257)
Sense of rotation	Counter clockwise
Max. operating pressure	4.2 bar
Stages	1
Impeller type	Semi axial impeller
Shut off head	42.8 m
Max. shaft power	19.8 kW
Weight of unit	145 kg
(without detachable Accessories)	

#### Discharge port

Pressure rating	PN 16
Rated diameter	DN 125
Standard	EN 1092-2

#### Impeller Ø

Max.	176 mm
Min.	148 mm
designed	176 mm

#### Flow

	Referring to: Speed in operating point
Nominal	46.7 l/s
Max-	57.2 l/s
Min-	15 l/s

#### Motor

	Referring to: Rated speed
Manufacturer / Type	NU 611T-2/22-o
Specific design	NU (drinking water filling)
Rated power	22 kW
Electric voltage	400 V
Power input with rated power	26.2 kW
Current input with rated power	47.3 A
Number of poles	2
Rated speed	2850 1/min
Load	125 / 100 / 75 / 50 / 25 %
cos phi	0.83/0.8/0.75/0.65/0.45
cos phi with starting	0
Efficiency	83/84/83/78/69
Operation type (VDE 0530)	S1 immersed
Max. fluid temperature	40
Min. flow velocity	0.5
Starting curr. d-o-l/ YD	245 A / 81.7 A
Starting torque	133 Nm
Inertia moment	0.0407 kg m <sup>2</sup>
Starts per hour max.	20
Degree of protection	IP 68
Weight of motor	83 kg
Motor connection cable	4G6 S1BB
Application limits for operation with frequency inverter:	
- Max. voltage rise: 500 V/μs	
- Max. overvoltage (phase - phase): 1000 V	

#### Pump materials - Material design

	Offshore
Suction piece	G-Cu Sn10
Stage- /guide casing	G-Cu Sn10
Discharge PN 10-16	G-Cu Sn10
Discharge PN 25-40	G-Cu Sn10
Impeller	G-CuAl10Ni
Stationary wear ring	1.4580
Pump shaft	1.4462
Shaft sleeve	1.4401 / 1.4404
Pump end bearing	1.4571 + NBR
Screws / tightening bolt	A 4 - 70 / A 4

#### Motor materials

Material version:	D
Shaft sealing:	Mechanical seal
Shaft:	1.4462
Housing:	1.4571
Motor shroud:	1.4541
Radial bearings:	Steel/carbon
Thrust bearing:	Steel/carbon
Screws and nuts:	1.4401

According to IEC 60034-1

No test norm defined for this product

Subject to change

Software version  
Data version

Spaix® 5-2024.2 - 2024/09/18 (Build 140), 64 bit  
21.11.2024

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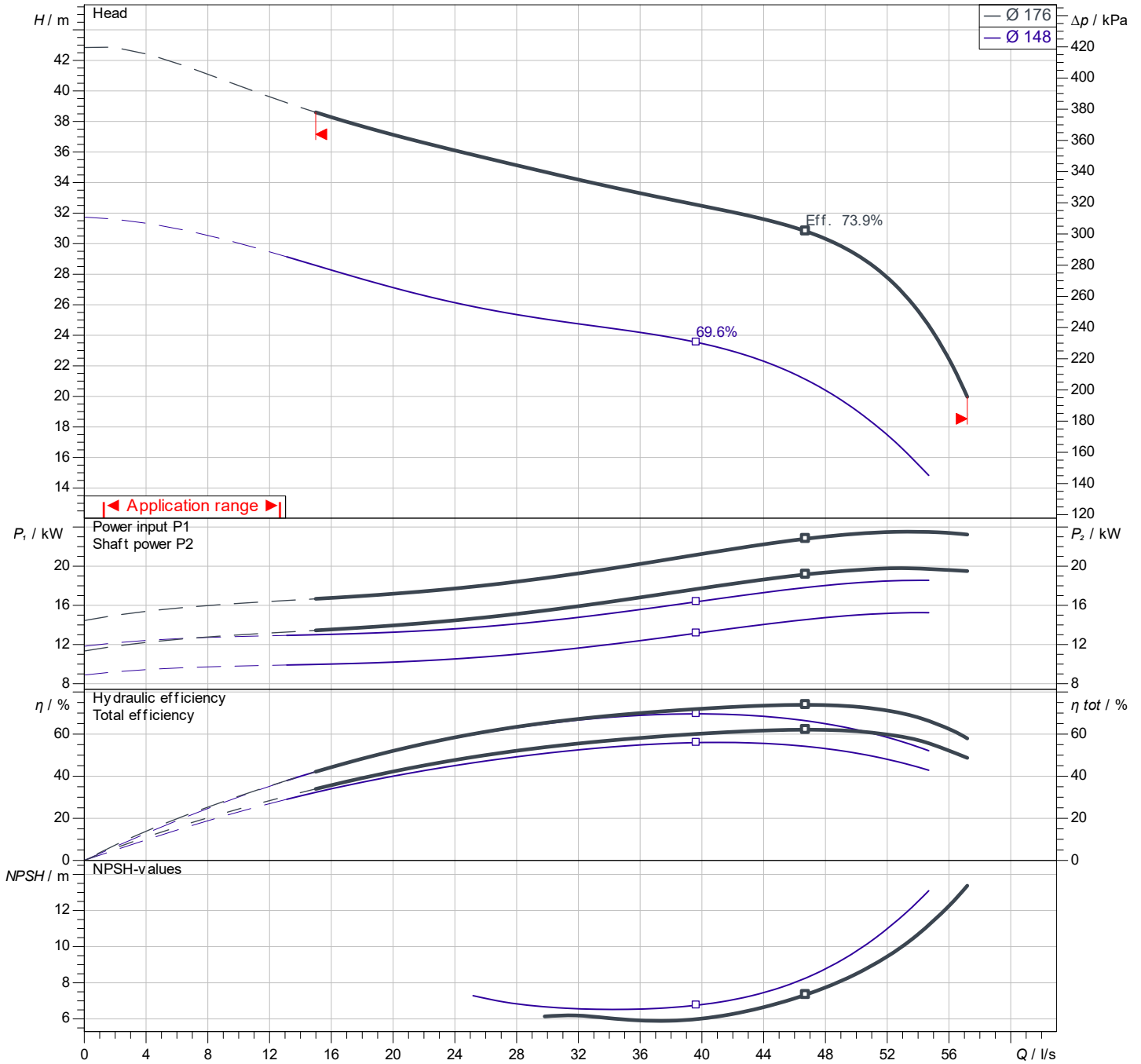
Project ID                      Untitled project 2025-03-03 23:00:00.495

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#### Pump

Stages	1
Impeller Ø	designed 176 mm
Nominal speed	2,900 1/min
Frequency	50 Hz
Impeller type	Semi axial impeller

#### Motor

Rated power	22 kW
Sel. explosion protection	

#### Duty point data

Volume flow	
Head	
Shaft power P2	P <sub>2</sub>
Hydr. efficiency η hyd.	
Power input P1	P <sub>1</sub>
Required pump NPSH	
Rotational speed	2861 1/min

Subject to change

Software version  
Data version

Spaix® 5-2024.2 - 2024/09/18 (Build 140), 64 bit  
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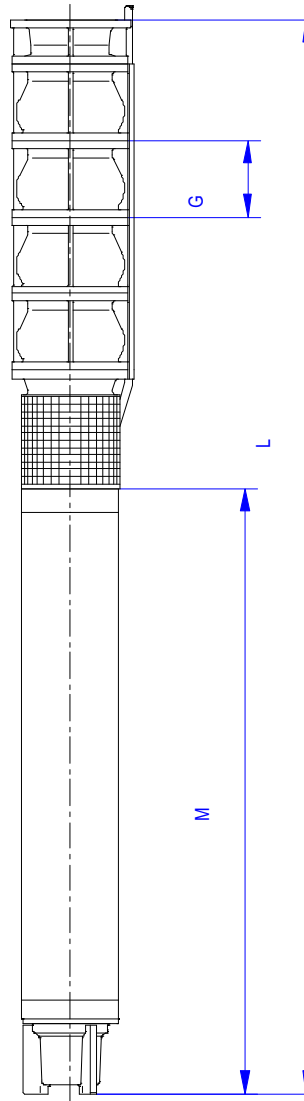
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#### Dimensions

Name	Value	Name	Value
G	150 mm		
L	1,596 mm		
M	1,079 mm		

#### Connections

Discharge port	DN 125 PN 16 PN 16
Intake piece	
Non-return valves	no