

WPJ-250



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**NOMINAL OPERATION PARAMETERS AT
PURE WATER PUMPING
(for the maximum rotation speed and the
largest rotor)**

Capacity	Q_n	1000	m ³ /h
Head	H	100	m
Rotational speed	n	1485*	rpm
Impeller diameter	D_z	580*	mm
Shaft power	P_n	371	kW
Weight	m	1800	kg
Max. permissible size of solids		56	mm
Smallest flow cross-section		80	mm

*Pump construction enables decreasing the operational parameters by reducing the rotation speed and/or reducing the rotor's diameter, adapting the pump to the system without choking the pump.

TYPICAL APPLICATIONS

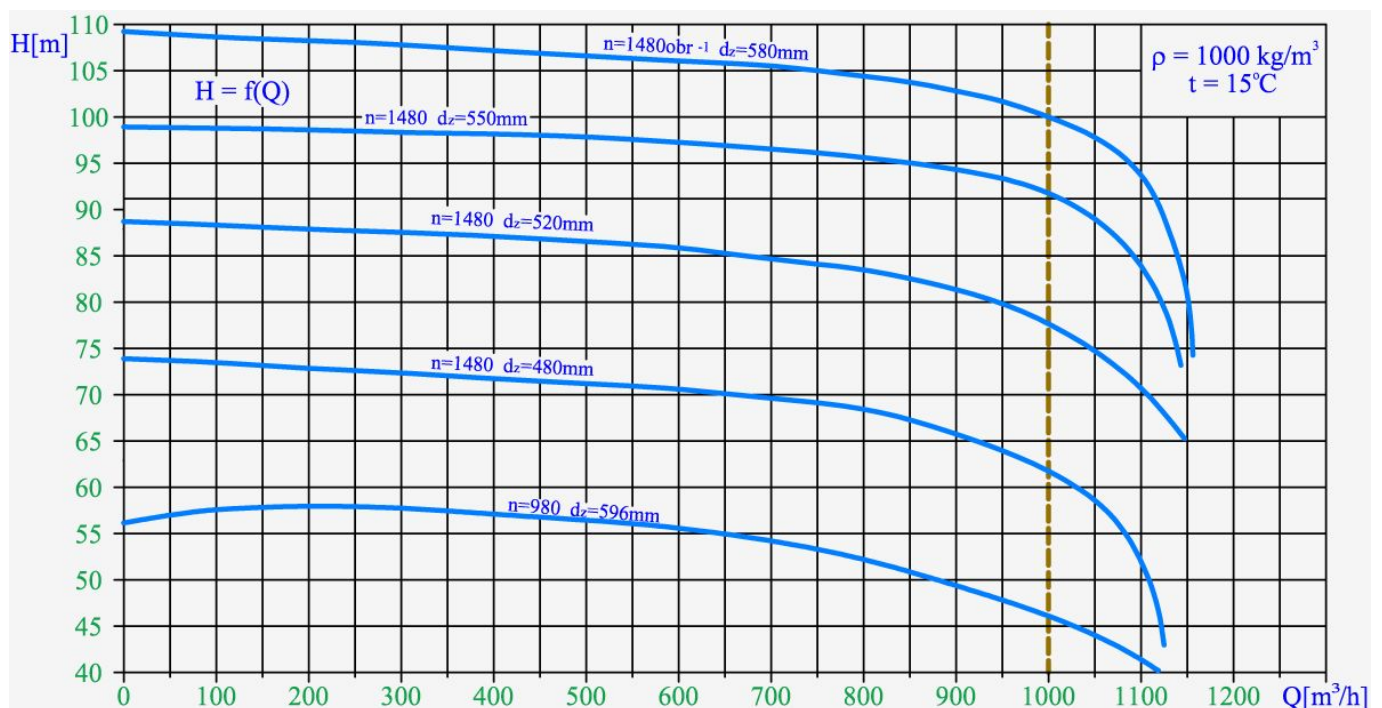
- pumping mixtures of water and solids, with large grains and highly abrasive properties,
 - pumping mixtures of water and quartz sand, ores, coal, slag, ash,
 - mining – WPJ pumps intended to replace hydrotransport drainage pumps used so far,
 - water supply systems,
 - pressure boosting,
 - technological processes,
 - industrial systems,
 - filtration systems.
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KEY ADVANTAGES

- long life ensured by the use of state-of-the-art corrosion and erosion resistant materials,
- possibility of operation with a frequency converter,
- possibility of serial operation,

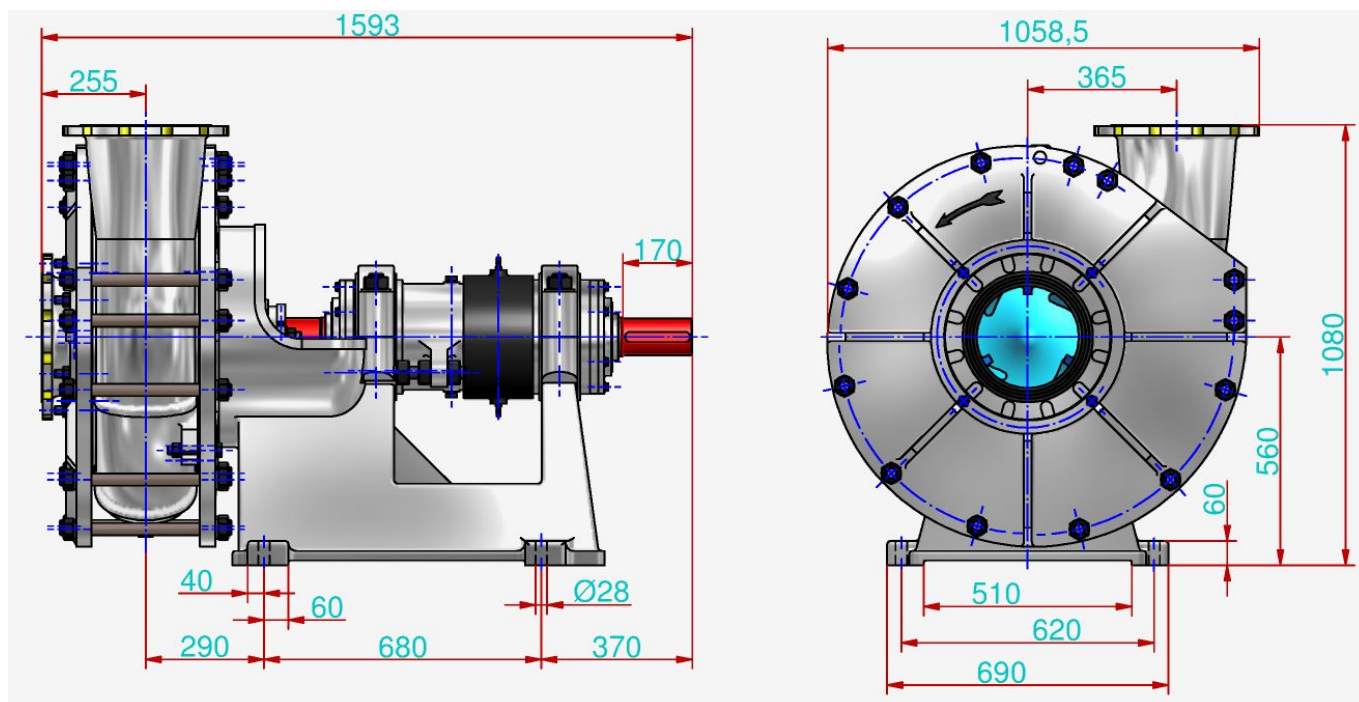
- the pumped mixture density can reach $\rho_{\max} = 1700 \text{ kg/m}^3$ while pumping mixtures with a 50% content of solids in water,
- silent and smooth operation,
- connection dimensions in compliance with hydrotransport pumps,
- inflow and suction operation,
- approved for operation in explosion-hazard zones – ATEX Ex I M2.

PUMP PERFORMANCE CURVE

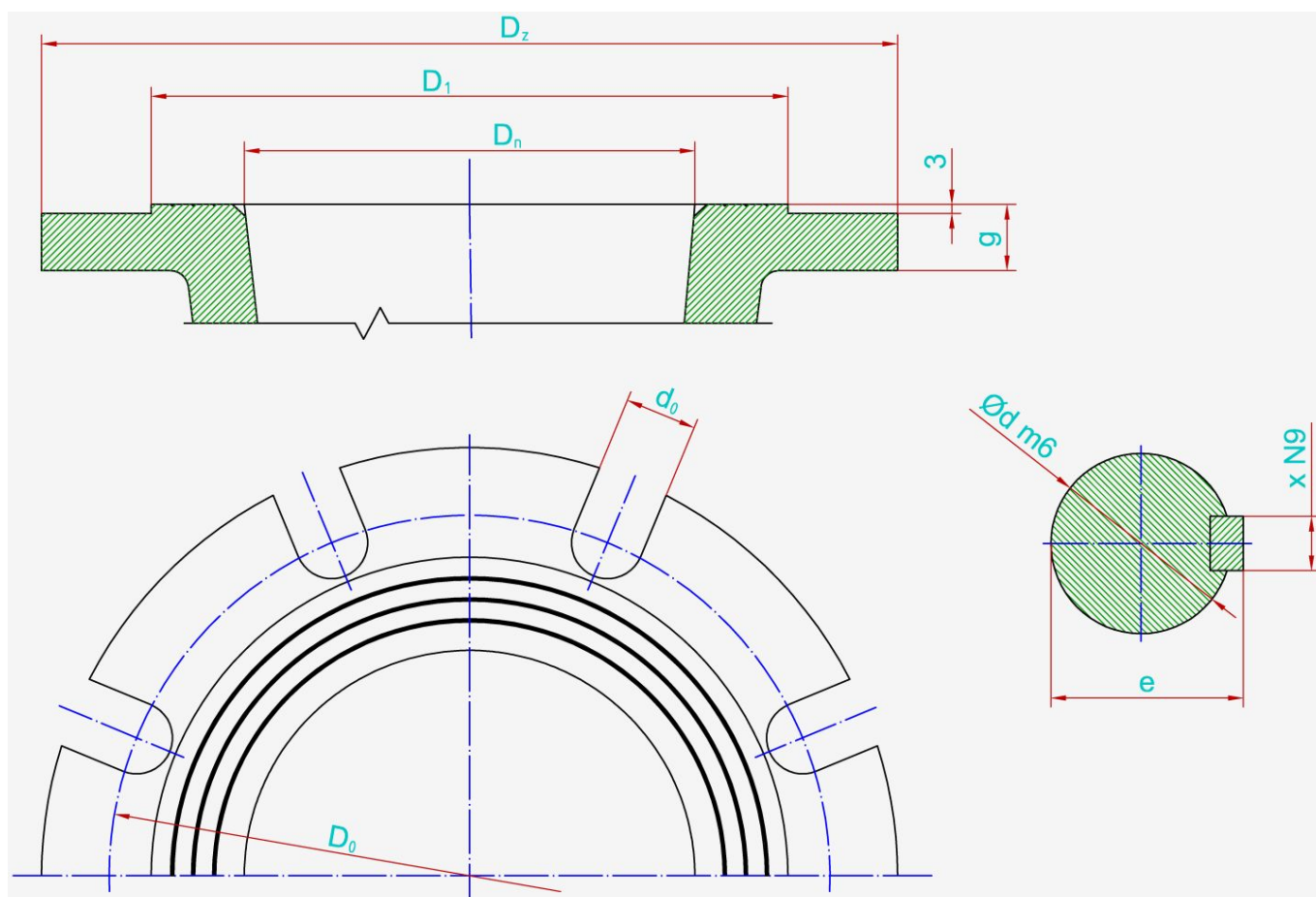


- $H = f(Q)$ – lift head acc. to rate flow,
- $P = f(Q)$ – power input acc. to rate flow,
- $\eta = f(Q)$ – efficiency acc. to rate of flow,
- d_z – impeller diameter,
- n – rotational speed.

MAIN DIMENSIONS OF PUMP



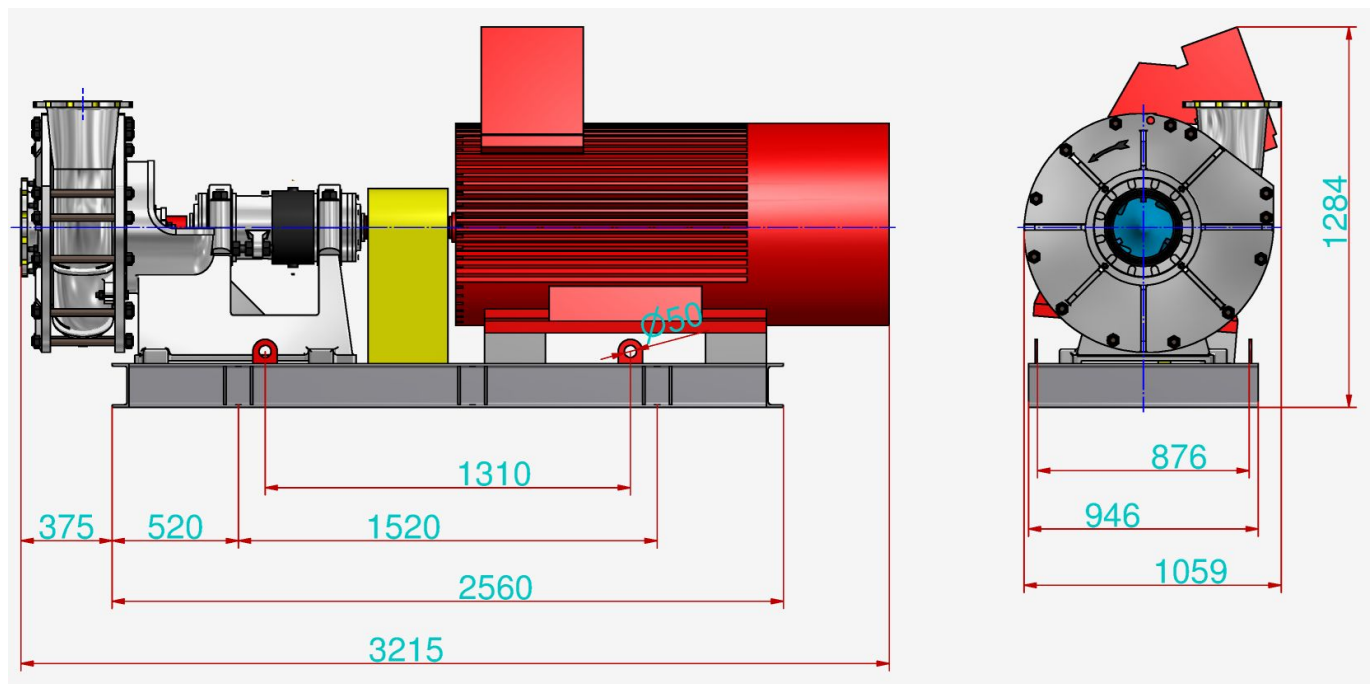
CONNECTION SIZES OF PUMP



	P _n	D _n	i	D _z	d ₀	g	D ₀	D ₁	d	e	x
Suction connector	16	250	12	405	28	26	355	320	-	-	-
Discharge connector A	16	250	12	405	28	26	355	320	-	-	-
Discharge connector B	25	250	12	425	28	32	370	335	-	-	-
Shaft / coupling	-	-	-	-	-	-	-	-	90	95	25
	bar	mm	-	mm	mm	mm	mm	mm	mm	mm	mm

The flanges are normally made in accordance with the standard PN-EN 1092-1 or PN-EN 1092-2.

MAIN DIMENSIONS OF PUMP UNIT



Motor type	Damel 2SG2 400M-4f	-
Coupling type	V365	-
Weight	4578	kg

It is possible to produce pumps with parameters different than those presented in the tables and on the graphs per agreement with the

manufacturer.