

# WPJ-150R

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

Capacity	Q <sub>n</sub>	360	m <sup>3</sup> /h
Head	H	69	m
Rotational speed	n	1480*	rpm
Impeller diameter	D <sub>z</sub>	450*	mm
Shaft power	P <sub>n</sub>	91,5	kW
Weight	m	755	kg
Max. permissible size of solids		55	mm
Smallest flow cross-section		60	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.

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## TYPICAL APPLICATIONS

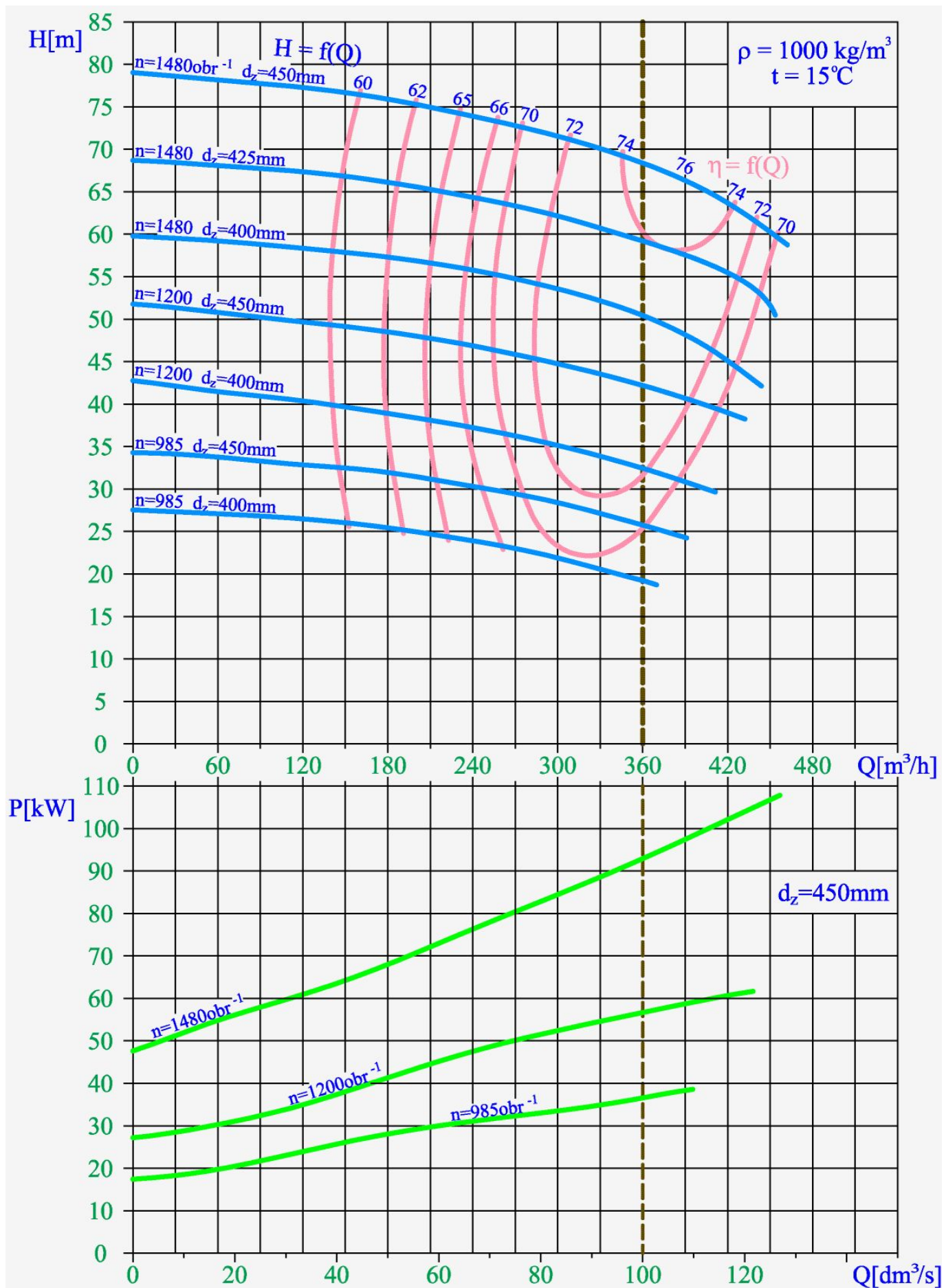
- pumping mixtures of water and solids, with large grains and highly abrasive properties,
  - pumping mixtures of water and quartz sand, ores, coal, slag, ash,
  - mining – WPJ pumps intended to replace hydrotransport drainage pumps used so far,
  - water supply systems,
  - pressure boosting,
  - technological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

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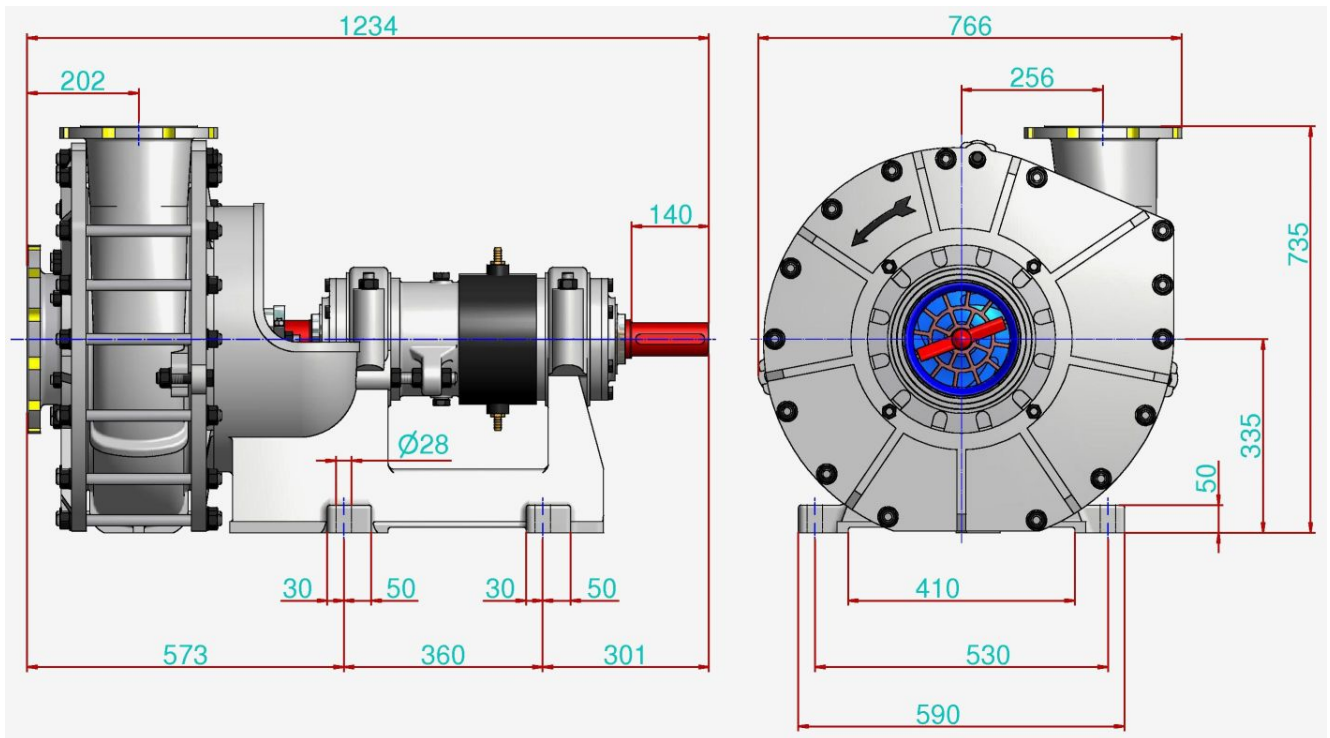
# PUMP PERFORMANCE CURVE



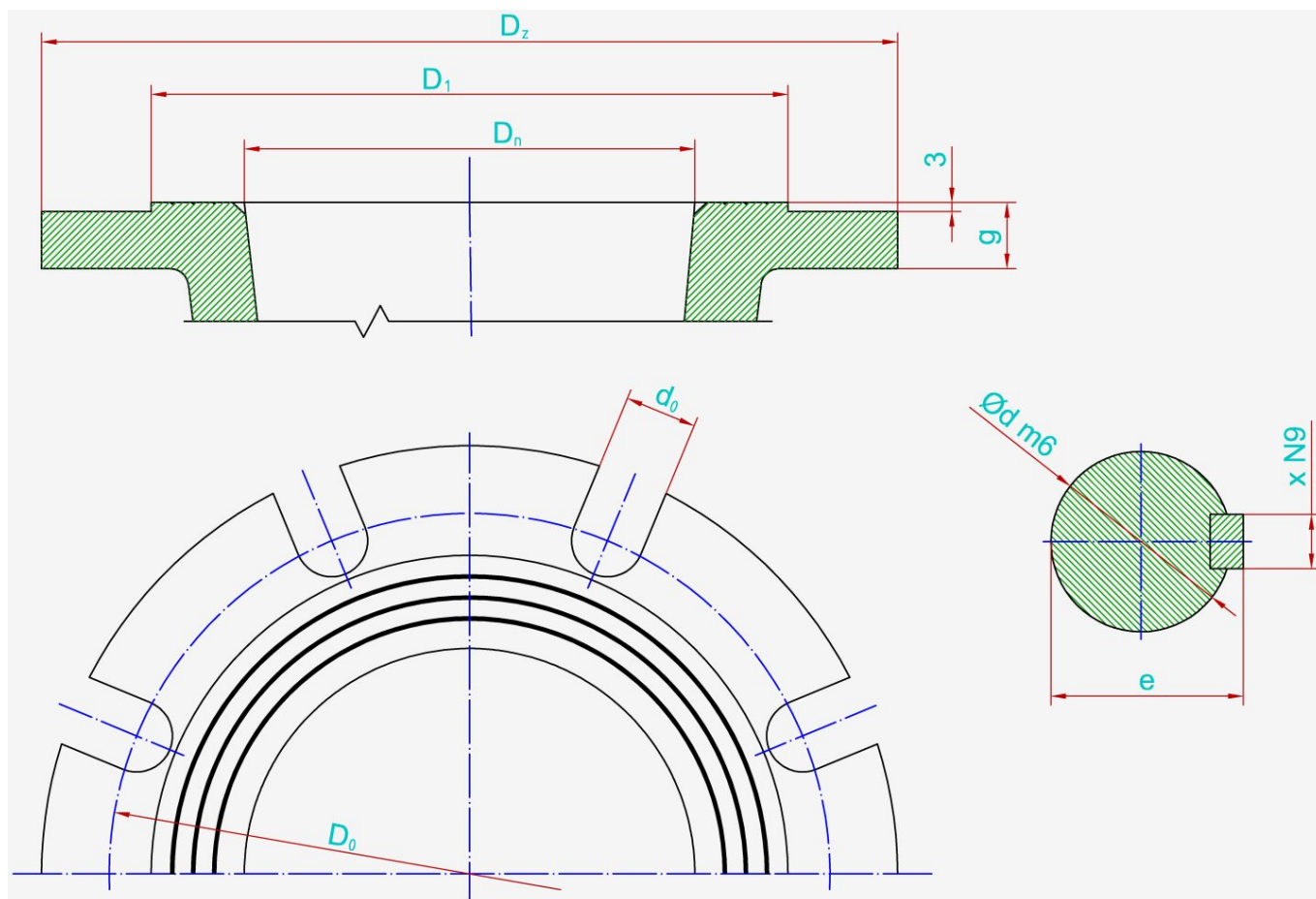
- $H = f(Q)$  - lift head acc. to rate flow,

- $P = f(Q)$  - power input acc. to rate flow,
  - $\eta = f(Q)$  - efficiency acc. to rate of flow,
  - $d_z$  - impeller diameter,
  - $n$  - rotational speed.
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## MAIN DIMENSIONS OF PUMP



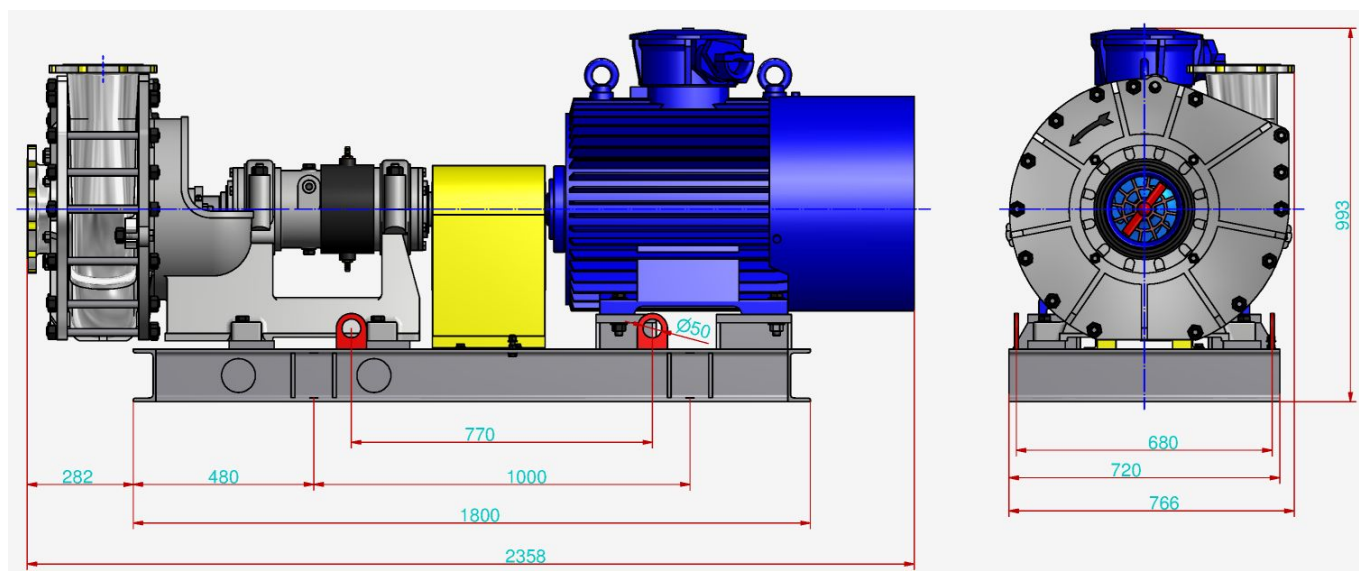
## CONNECTION SIZES OF PUMP



	$P_n$	$D_n$	$i$	$D_z$	$d_0$	$g$	$D_0$	$D_1$	$d$	$e$	$x$
<b>Suction connector</b>	16	200	12	340	24	24	295	212	-	-	-
<b>Discharge connector</b>	16	150	8	285	24	24	240	268	-	-	-
<b>Shaft / coupling</b>	-	-	-	-	-	-	-	-	60	64	18
	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	Celma dSg315S4-E	-
Coupling type	V245	-
Weight	1653	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.**