



LINED SLURRY PUMP

ZPY

API610



EBARA GREAT PUMPS CO.,LTD

ZPY slurry pumps are single-stage, single-suction, horizontal type, double-casing, and centerline-mounted process pumps for the petrochemical industry.

Applicable Occasions

- Refineries

It is especially applicable to the conveying of media containing solid catalyst particles under high temperature in the fluid catalytic cracking (FCC) process in refineries.

- Petrochemical industry

- Other chemical industries

Performance Range

- Flow rate: maximum 1500 m³/h

- Head: maximum 230 m

- Rotating speed: 1,450/2,900 rpm

- Maximum allowable working pressure: 5.0MPa

- Temperature range: maximum 420 °C

- Flange standard: GB9115, or other standards as required

- Turning direction: observed from the drive side, the impeller rotates clockwise.

- Inlet/outlet direction: End-Top

Structural Features

- It adopts the double-casing structure. The outer casing is a pressure-containing member designed according to API610; it has high strength and good rigidity and can ensure service life of more than 20 years; the inner casing is made of abrasion proof and erosion proof material, and is convenient to be replaced.

- The outer casing is designed to be centerline-mounted and suitable for heavy duty.

- The rotor is back pull-out designed, which is convenient for maintenance.

- The flow passage components are optimally designed with enclosed impellers, inducer as an option which enlarge high efficiency scope and enables low NPSHr and wide applicable medium

●The axial force is balanced by balance orifice, and residual axial force is borne by the thrust bearing.

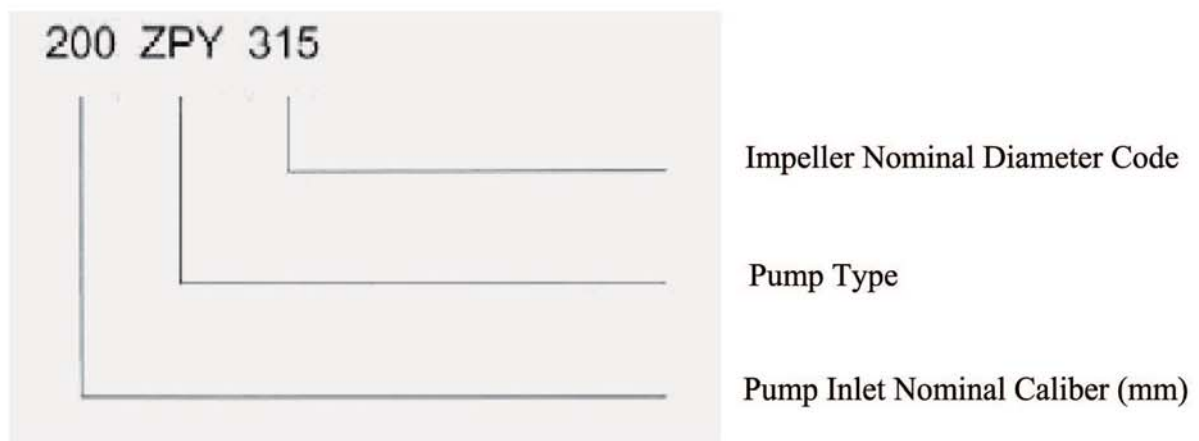
●There is a cooling water chamber in the bearing bracket and sealing chamber, which can ensure the safe and reliable operation under high temperature.

●The bearing box is equipped with single-row radial ball bearing and back-to-back two-row thrust ball bearing. The bearing can be lubricated through splashing of thin oil, making it possible to run in all weathers.

●It is equipped with a flexible metallic diaphragm type coupling, safe and reliable.

●It is equipped with cartridge type corrugated metal pipe mechanical seal and auxiliary devices, convenient and safe.

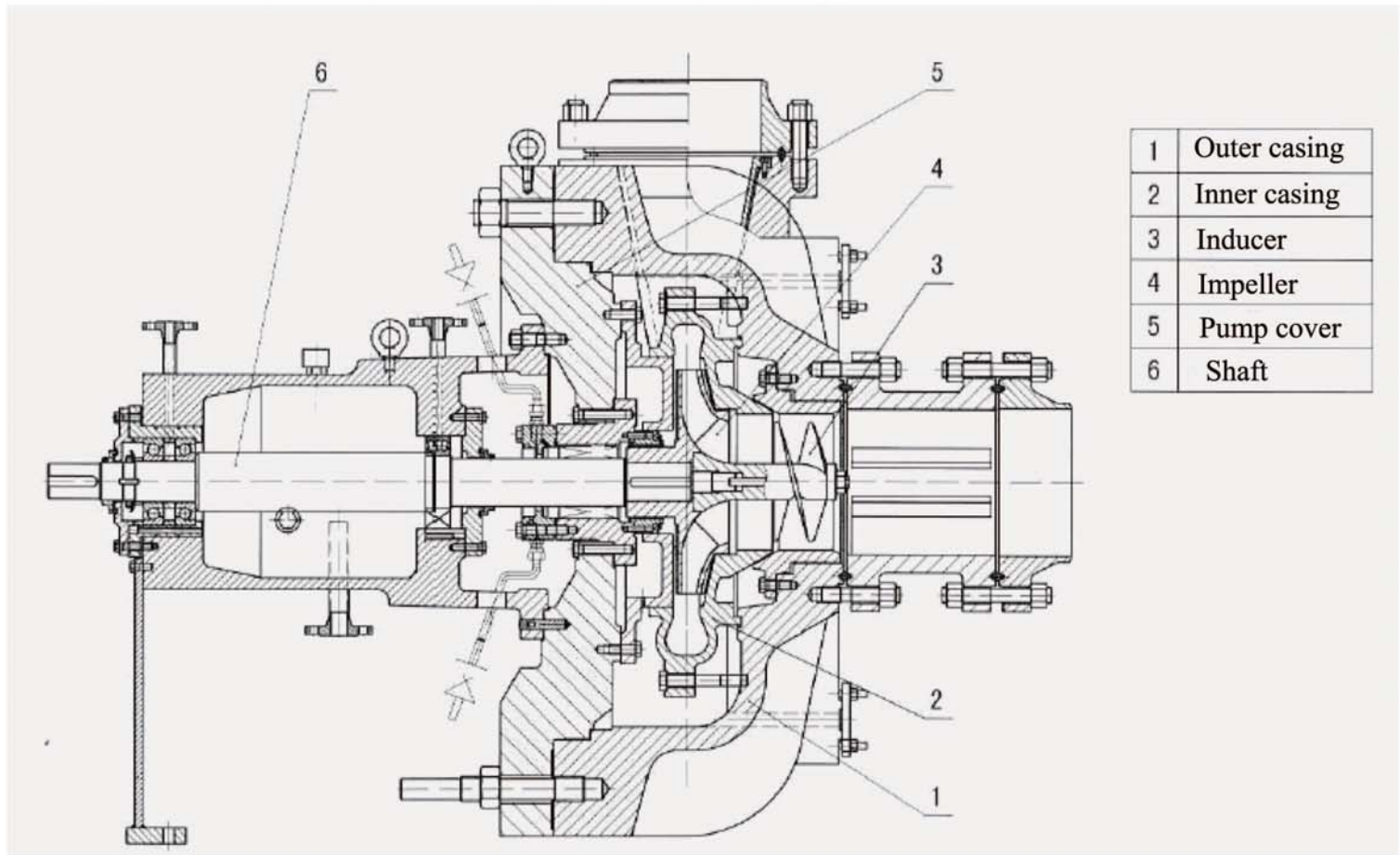
Marking Mode



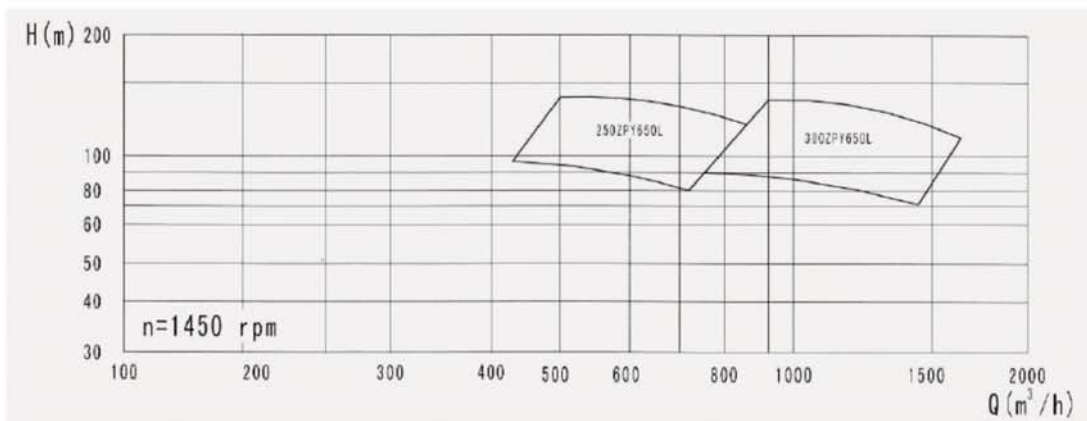
Materials Used

No.	Part Name	Material-1	Material-2
1	Outer casing	A487M Gr CA6NM A	Selected according to the medium condition
2	Inner casing	A4352 11	Selected according to the medium condition
3	Inducer	A487M Gr CA6NM A	Selected according to the medium condition
4	Impeller	A4352 11	Selected according to the medium condition
5	Pump cover	A487M Gr CA6NM A	Selected according to the medium condition
6	Shaft	A487M Gr CA6NM A	Selected according to the medium condition

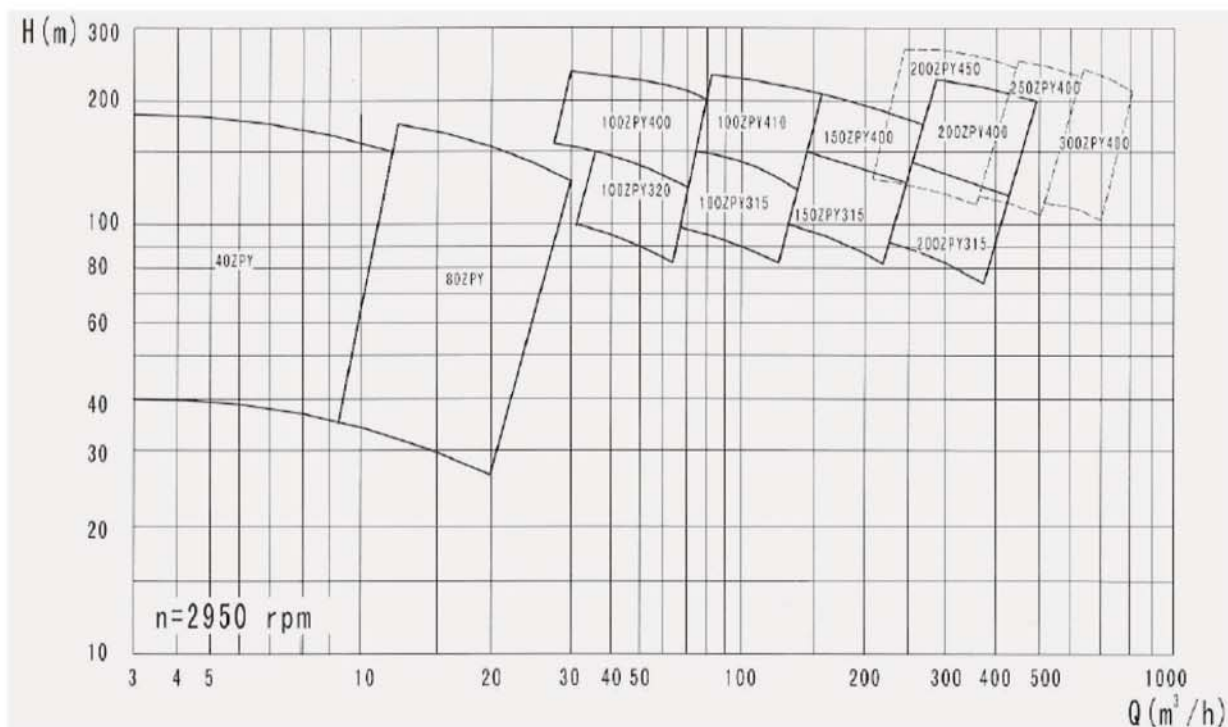
Pump Structural Diagram



[Model Spectrum 1 (only for preliminary model selection)]



Model Spectrum 2 (only for preliminary model selection)



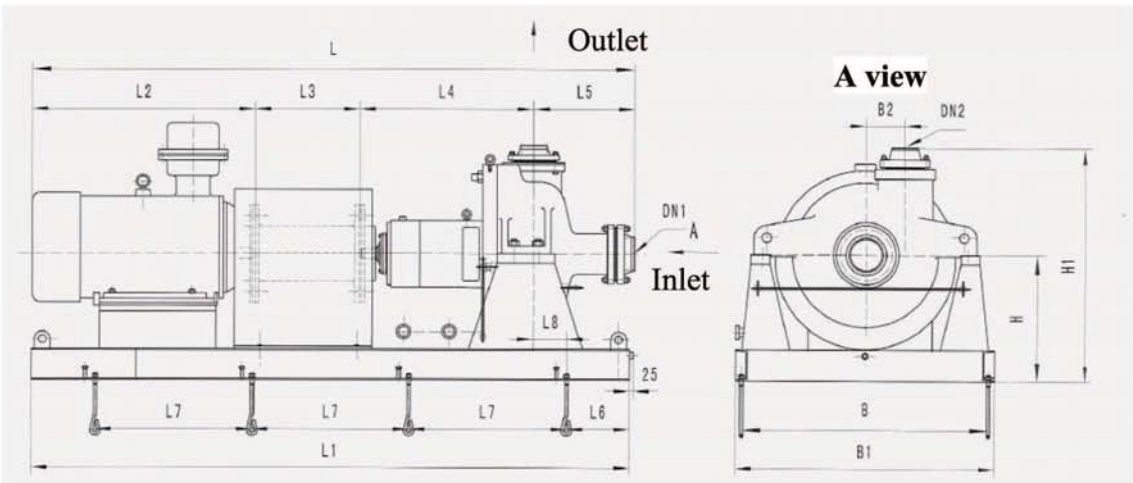
Note: the pump type in dotted line frame uses large-size casing.

Standard Performance Table

Performance Parameters	Flow Q (m^3/h)	Head H (m)	Rotation Speed n (rpm)	Efficiency η (%)
Model				
40ZPY	3-11	180	2,950	14
80ZPY	8-25	180	2,950	18-33
100ZPY315	141	127	2,950	69
100ZPY320	87	115	2,950	56
100ZPY400	82	194	2,950	48
100ZPY410	171	187	2,950	61
150ZPY315	250	126	2,950	78
150ZPY400	300	194	2,950	74.5
200ZPY315	442	125	2,950	82.5
200ZPY400	520	205	2,950	78.5
200ZPY450	420	134	2,950	68
250ZPY400	587	115	2,950	73
300ZPY400	700	120	2,950	75
250ZPY650L	900	125	1,480	75
300ZPY650L	1,400	120	1,480	82

(Data in the table are only for reference)

Installation Dimension Figure (only for reference)



出口	Outlet
A 向	A view
进口	Inlet

Pump Model	Motor Provided		L	L1	L2	L3	L4	L5	L6	Nx 17	L8	B	B1	B2	H	H1	DN1	DN2	Weight (kg)																										
	Model	Power (kW)																	Pedestal	Pump																									
40ZPY	YB100L-2	3	1,458	1,590	430					2×										210	180																								
	YB112M-2	4	1,488		460					600																																			
	YB132S1-2	5.5	1,548	1,650	520					2×										150		660	218	220	600	80	700	750	90	410	775	DN40	DN32	220											
	YB132S2-2	7.5			650					250																																			
	YB160M1-2	11			670					650																																			
	YB160M2-2	15	1,698	1,800	670					650																																			
80ZPY	YB100L-2	3	1,518	1,650	430					2x600									580	470																									
	YB112M-2	4	1,548		460																																								
	YB132S1-2	5.5	1,608	1,700	520					2x700									200		643	245	250	2x700	80	790	840	130	490	891	DN80	DN50	680												
	YB132S2-2	7.5			710																																								
	YB160M1-2	11	1,758	1,920	670					710														790							840	130	490	891	DN80	DN50	680								
	YB160M2-2	15			730																																								
	YB160L-2	18.5	1,798	810	710																																								
	YB180M-2	22	1,818							730																																			
	YB200L1-2	30	1,898	2,030						810																									2x750	80	910	960	220	560	1,025	DN100	DN80	900	
	YB200L2-2	37																																											840
	YB225M-2	45																																											840
	YB200L2-2	37																																											810
100ZPY315	YB225M-2	45	2,032.5	2,160		810	200	712.5	280	300	3x550	80	910	960	220	560	1,025	DN100		DN80															900									780	
	YB225M-2	45	2,062.5			840																																							

[illegible]

Supply Range of Complete Set

- Pump;
- Motor; Fire proof motor or common motor available as option
- Baseplate and anchor bolts;
- Coupling;
- Pump inlet/outlet companion flanges.

Ordering Instructions

- The pump model, material, type of gland seal and electric motor will be decided according to the service conditions. Specification including the medium name, characteristics (density, temperature, vapor pressure), flow rate, head, and suction pressure must be provided for model selection.
- Should there be special requirement on motor, please specify the explosive-proof grade, protection grade, ambient temperature, voltage and frequency
- For shaft seal selection, please note the type of shaft seal, material, API682 seal pipe code, and so on.



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Company Profile

EBARA GREAT PUMPS CO.,LTD. Is a joint venture invested by Ebara Corporation, Japan and the Zhejiang Great Industry Share Co., Ltd. The first investment is 12.2 million U.S. dollar, and 51% of the investment is from Ebara, 49% is from Great.

Being a centrifugal-pump manufacturer in the beginning, Ebara was founded in 1912. Up to now, its product line has grown to turbo machinery, including fans, blowers, turbines, and a variety of other equipments such as environment related products and precision machinery. At present, as a specialist in the manufacture of turbo machinery, Ebara is not only a transnational manufacturer of machinery, but a global engineering company that devotes itself to link technologies and products effectively as well. Ebara, by manufacturing and distributing products, strives to promote the safe and effective use of environmental resources and then contributes to create a society in which people can lead happier and healthier lives.

Zhejiang Great Industry Share Co., Ltd., established in 1993, is a new and hi-tech enterprise which manufactures hi-temperature, h-pressure and hi-speed special centrifugal pumps and general service pumps. Great all along serves the industrial fields such as petroleum and petrochemical with advanced administration faith, excellent products as well as high responsibility, so as to rapidly become a high-reputation centrifugal-pump manufacturer in such fields.

The joint venture will introduce all series of advanced technologies of designing and developing API610 Process pumps and general service pumps from Ebara. Replying on Ebara powerful professional technology and Great principle which is "the customers are uppermost", the joint venture, facing the global market, designs, develops and manufactures high-quality centrifugal pumps, for the purpose of supplying customer satisfaction with the newest contemporary achievements and precise, efficient and overall service.

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All specifications are subject to change without notice