



**JTD** In-line Circulation Pump

**50Hz**



## Introduction

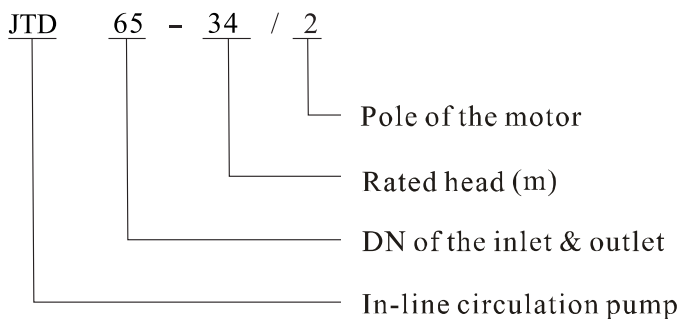
JTD in-line circulation centrifugal pump is single stage, single suction centrifugal pump. We use an excellently performed hydraulic model when designing. Flow part of pump is manufactured by precision casting technology. The technology makes flow part smooth with little friction and high efficiency.

The advantage of JTD series is energy saving, little noise, reliable performance. The structure is compact. It is easy to assemble and dismantle. It can be connected with pipe work directly. It is used for liquid transferring and circulation and boosting.

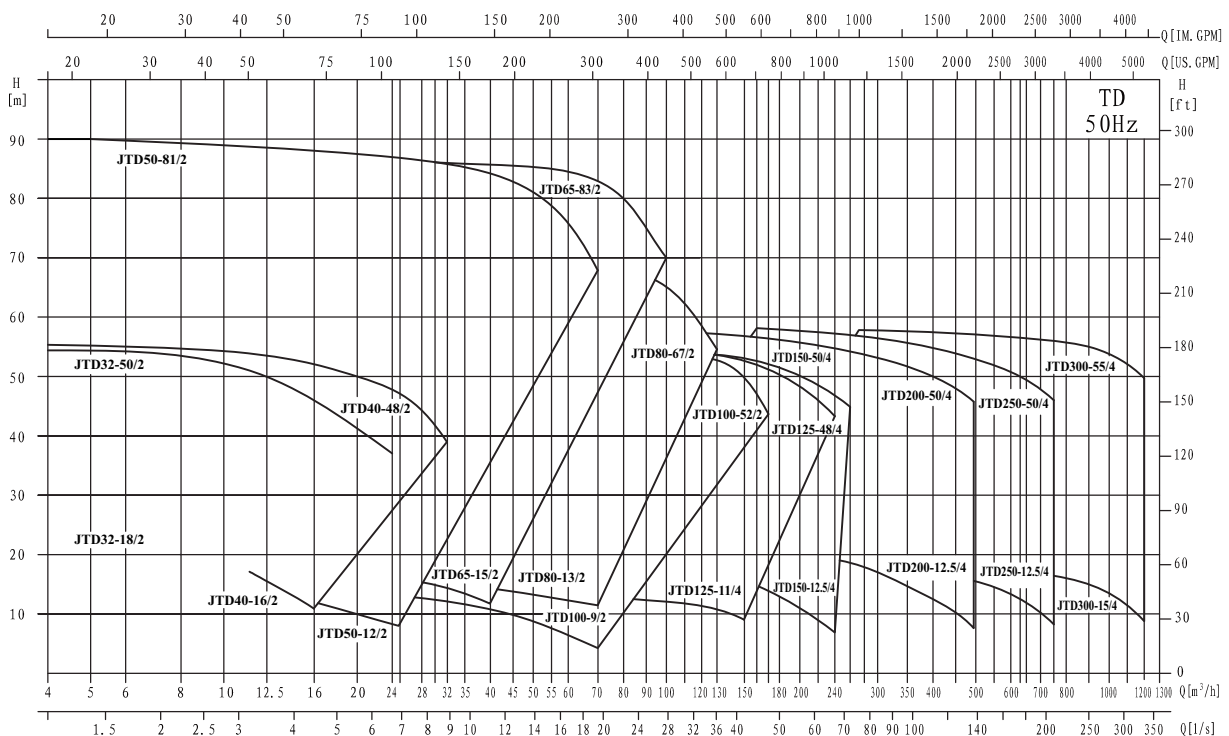
JTD series pump has an innovative easy-disassemble structure design, it is not necessary to dismantle the motor when you change the mechanical seal.

## Definition of Model

JTD65-34/2



## Performance scope



## Applications

The pumped liquid is clean, thin, non-corrosive, non-flammable, and non-explosive liquid which shall not contain any solid grain and fibre that might damage the pump mechanically or chemically.

The detailed requirements on the liquid is in table 2. If the liquid viscosity or density is beyond the required level, the performance curves will descend and energy consumption will be increased.

Liquid temperature:  $-15^{\circ}\text{C} \sim 110^{\circ}\text{C}$

Max. Working pressure: Normal type: PN12 bar ; special type: PN 16 bar.

Liquid		Max. temperature	Liquid requirement	Application
Water	Groundwater	$< 90^{\circ}\text{C}$		TD pumps are applicable for urban water supply, industrial water, cooling system, and cold & hot water for regional heat supply system: 1) main circulation pump 2) mixed circuit pump 3) boiler mixed-flow pump 4) gas-fired freezer pump 5) filter pump 6) constant pressure system pump 7) urban hot water circulation
	Boiler feed water	$< 110^{\circ}\text{C}$		
	District feed water	$< 110^{\circ}\text{C}$		
	Condensate	$< 90^{\circ}\text{C}$		
	Softened water	$-15^{\circ}\text{C} \sim 110^{\circ}\text{C}$		
	Alkalescent water		Weak alkalescence	
	Cooling and cutting lubricant		Additive and little impurity may damage the shaft seal	
Coolants	Hydrocarbon based antifreeze	$< 50^{\circ}\text{C}$	Little rime may damage the shaft seal	TD pumps can be used in chemical industry, pharmaceutical industry, food processing and so on. 1) liquid feeding 2) system pressure boosting 3) mixed circuit circulation pump
	Alcoholised compound	$< 50^{\circ}\text{C}$ 50%		
	30% brine(NaCl, CaCl <sub>2</sub> solution, etc)	$< 50^{\circ}\text{C}$	Little rime may damage the shaft seal	
Organic solvents	Isopropyl alcohol	$\leq 60^{\circ}\text{C}$	Flammable liquid	
	Propyl alcohol	$\leq 60^{\circ}\text{C}$		
Oxidants	Hydrogen peroxide	$\leq 60^{\circ}\text{C}$ 20%		

## Product structure and component material

The design of the pump is pump and motor. Pump part can be pulled out. The JTD series are equipped with standard motor and mechanical seal. Motor is TEFC standard motor. Its major dimensions are in conformity with JB/T8680 standard.

The pump body is equal to a section of pipeline. While in maintenance, blind flange can be used to seal to pump cover which enable the normal operation of pumps.

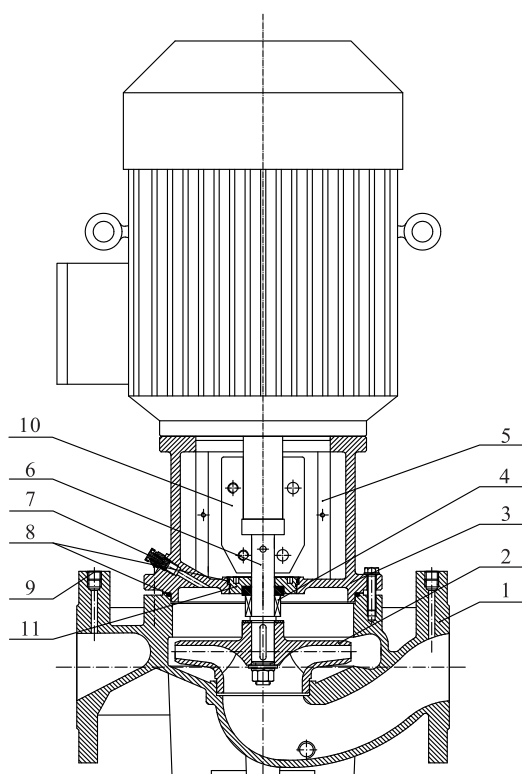
The flange connection dimension are in conformity with the related provisions PN16 in GB/T 17241.6 or ISO7005-2/DIN 2501.

The inlet and outlet diameters are in conformity with related standard dimensions.

The pump head is to connect motor and the pump. "O" ring is used to seal the pump head and the pump.

See Table 4 for component materials.

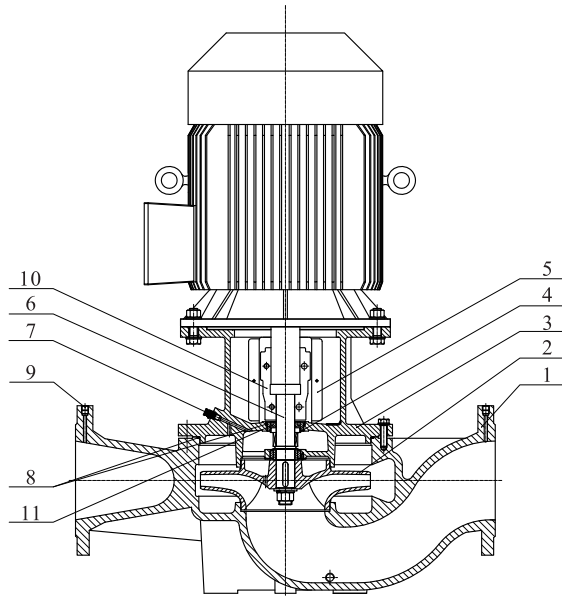
### Section drawing JTD32-18/2~JTD125-14/4



### Material JTD32-18/2~JTD125-14/4

NO.	Parts	Material
1	Pump body	HT200
2	Impeller	HT200
3	Pump head	HT200
4	Mechanical seal	Carbon /Silicon Carbide
5	Guard plate	06Cr19Ni10
6	Shaft	20Cr13
7	Air release bolt	06Cr19Ni10
8	O Ring	NBR
9	Plug	06Cr19Ni10
10	Coupling	QT500-7
11	Mechanical seal base	Cast steel

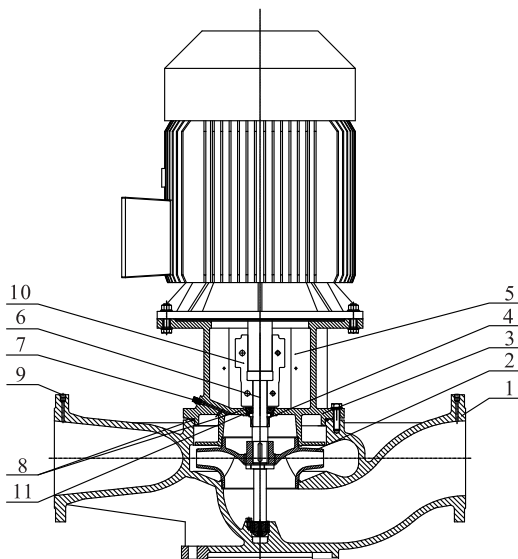
## Section drawing JTD125-18/4~JTD150-50/4



## Material JTD125-18/4~JTD150-50/4

NO.	Parts	Material
1	Pump body	HT200
2	Impeller	HT200
3	Pump head	HT200
4	Mechanical seal	Carbon/Silicon Carbide
5	Guard plate	06Cr19Ni10
6	Shaft	20Cr13
7	Air release bolt	06Cr19Ni10
8	O ring	NBR
9	Plug	06Cr19Ni10
10	Coupling	QT500-7
11	Mechanical seal base	Cast steel

## Section drawing JTD200~JTD300



## Material JTD200~JTD300

NO.	Parts	Material
1	Pump body	HT200
2	Impeller	HT200
3	Pump head	HT200
4	Mechanical seal	Carbon /Silicon Carbide
5	Guard plate	06Cr19Ni10
6	Shaft	20Cr13
7	Air release bolt	06Cr19Ni10
8	O ring	NBR
9	Plug	06Cr19Ni10
10	Coupling	QT500-7
11	Mechanical seal base	Cast steel

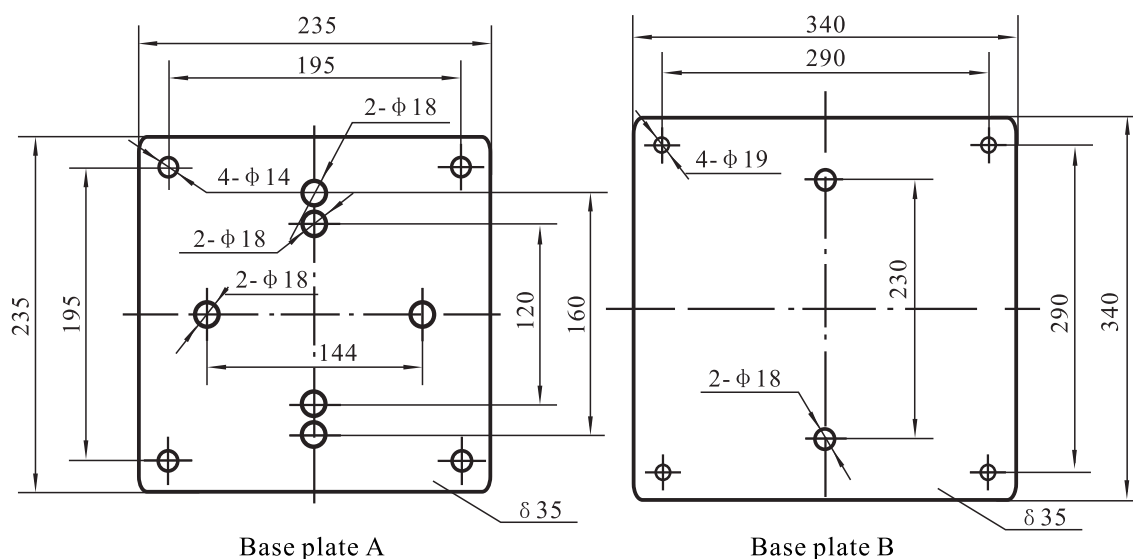


table 3

50Hz

NO.	Product model	Base plate A	NO.	Product model	Base plate A	NO.	Product model	Base plate B
1	JTD32-18/2	A	27	JTD50-81/2	A	53	JTD100-17/2	A
2	JTD32-21/2	A	28	JTD65-36/2	A	54	JTD100-22/2	A
3	JTD32-25/2	A	29	JTD65-48/2	A	55	JTD100-27/2	A
4	JTD32-32/2	A	30	JTD65-15/2	A	56	JTD100-33/2	A
5	JTD32-38/2	A	31	JTD65-19/2	A	57	JTD100-40/2	B
6	JTD32-50/2	A	32	JTD65-22/2	A	58	JTD100-48/2	B
7	JTD40-16/2	A	33	JTD65-30/2	A	59	JTD100-52/2	B
8	JTD40-20/2	A	34	JTD65-34/2	A	60	JTD125-11/4	B
9	JTD40-18/2	A	35	JTD65-40/2	A	61	JTD125-14/4	B
10	JTD40-25/2	A	36	JTD65-50/2	A	62	JTD125-18/4	B
11	JTD40-30/2	A	37	JTD65-61/2	A	63	JTD125-22/4	B
12	JTD40-36/2	A	38	JTD65-67/2	A	64	JTD125-28/4	B
13	JTD40-48/2	A	39	JTD65-83/2	A	65	JTD125-32/4	B
14	JTD50-32/2	A	40	JTD80-13/2	A	66	JTD125-40/4	B
15	JTD50-38/2	A	41	JTD80-18/2	A	67	JTD125-48/4	B
16	JTD50-48/2	A	42	JTD80-22/2	A	68	JTD150-12.5/4	B
17	JTD50-12/2	A	43	JTD80-28/2	A	69	JTD150-17/4	B
18	JTD50-15/2	A	44	JTD80-40/2	A	70	JTD150-21/4	B
19	JTD50-18/2	A	45	JTD80-48/2	A	71	JTD150-25/4	B
20	JTD50-24/2	A	46	JTD80-30/2	A	72	JTD150-33/4	B
21	JTD50-28/2	A	47	JTD80-38/2	A	73	JTD150-40/4	B
22	JTD50-35/2	A	48	JTD80-47/2	A	74	JTD150-50/4	B
23	JTD50-40/2	A	49	JTD80-54/2	A			
24	JTD50-50/2	A	50	JTD80-67/2	A			
25	JTD50-60/2	A	51	JTD100-9/2	A			
26	JTD50-70/2	A	52	JTD100-15/2	A			

Remark: - Base plate is optional part need to note when order.  
 - For other models details please consult.

