



Компания ZHEJIANG GRANDFAR PUMP INDUSTRY CO.,LTD.

Номер телефона: +86-576-89890098

Дата создания: 2026-06-04

**Модель: GTD150-25-220/4**



GTD - ирригационный центробежный насос, он подходит для перекачивания чистой воды без абразивных частиц и жидкостей, которые химически не...

#### **КОНСТРУКТИВНЫЕ ОСОБЕННОСТИ НАСОСА**

Корпус насоса Чугун Рабочее колесо Чугун Вал двигателя: нержавеющая сталь Механическое уплотнение: керамика-графит Керамика-графитовая изоляция  
Класс: F  
Защита: IP 55.

#### **ОСОБЕННОСТИ ДВИГАТЕЛЯ**

Серия GTD - это вертикальные центробежные насосы для перекачки чистой воды, не содержащей абразивных частиц, и жидкостей, химически не агрессивных к материалу насоса. Насосы используются для подачи и перекачки воды в системах охлаждения, отопления, циркуляции и кондиционирования, а также в пожаротушении и промышленности. Насосы должны устанавливаться в закрытом помещении, защищенном, по крайней мере, от воздействия неблагоприятных погодных условий.

#### **ХАРАКТЕРИСТИКИ НАСОСА**

Интегрированная конструкция двигателя и вала насоса для низкого уровня шума и высокой эффективности передачи Двигатель с воздушным охлаждением, полностью закрытая и защищенная конструкция, компактная конструкция и небольшие внешние размеры.

#### **МЕРЫ ПРЕДОСТОРОЖНОСТИ ПРИ ИСПОЛЬЗОВАНИИ НАСОСА**

Температура жидкости до +120°C;  
температура окружающей среды до +40°C.

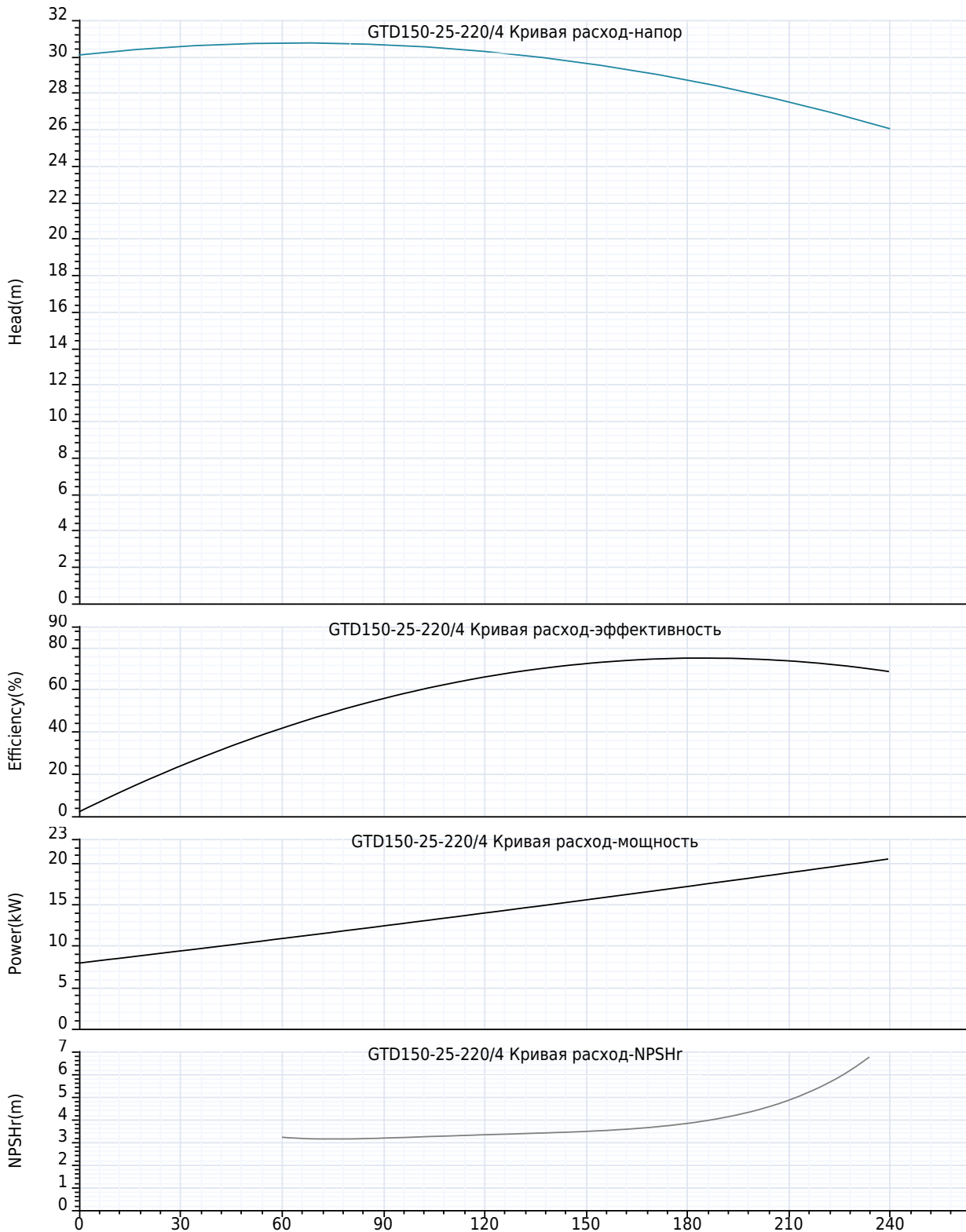


Компания ZHEJIANG GRANDFAR PUMP INDUSTRY CO.,LTD.

Номер телефона: +86-576-89890098

Дата создания: 2026-06-04

**Модель: GTD150-25-220/4**





Компания ZHEJIANG GRANDFAR PUMP INDUSTRY CO.,LTD.

Номер телефона: +86-576-89890098

Дата создания: 2026-06-04

**Модель: GTD150-25-220/4**

**Технология:**

Максимальный расход:	240 m <sup>3</sup> /h
Максимальный напор:	28 m
Номинальный расход:	200.0 m <sup>3</sup> /h
Номинальный напор:	28.10 m

**Установка:**

Тип соединения:	фланец
фланцевое соединение:	DIN
Макс. давление/температура(высокая температура):	25 bar / 120 °C
Макс. давление/температура(низкая температура):	25 bar / 0 °C
Номинальное давление:	16 bar
Размер входа:	DN150
Размер на выходе:	DN150

**Материал:**

Корпус насоса:	литейный чугун
Рабочее колесо:	Чугун
Вал двигателя:	Нержавеющая сталь
Уплотнение:	Керамико-графит

**Температура окружающей среды:**

Температура окружающей среды:	40°C
-------------------------------	------

**Двигатель:**

Номер фазы двигателя:	3
Степень защиты:	IP55
Класс изоляции:	F
Мощность двигателя:	22 kW
Скорость вращения:	2900 rpm
Частота мощности:	50 Hz
Номинальное напряжение:	380 V
Номинальный ток:	42.2 A

**Тип и температура жидкости:**

Транспортируемая жидкость:	Чистая вода
Высокотемпературный тип:	-40°C ~ 120°C

**Другие:**

вес нетто:	354 Kg
------------	--------



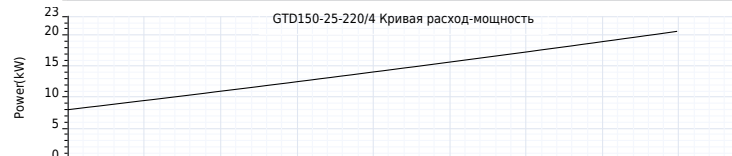
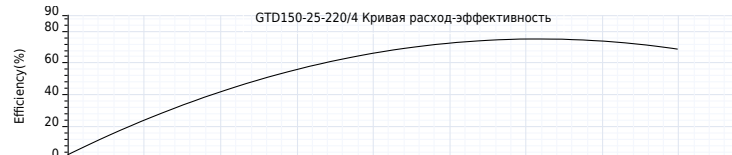
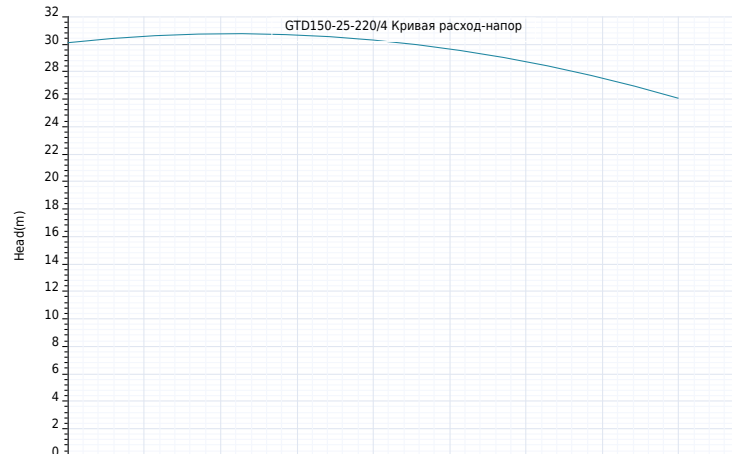
Компания ZHEJIANG GRANDFAR PUMP INDUSTRY CO.,LTD.

Номер телефона: +86-576-89890098

Дата создания: 2026-06-04

**Модель: GTD150-25-220/4**

Пояснение	Числовое значение
<b>Технология:</b>	
Максимальный расход:	240 m³/h
Максимальный напор:	28 m
Номинальный расход:	200.0 m³/h
Номинальный напор:	28.10 m
<b>Установка:</b>	
Тип соединения:	фланец
Макс. давление/температура(высокая температура):	25 bar / 120 °C
Макс. давление/температура(низкая температура):	25 bar / 0 °C
фланцевое соединение:	DIN
Номинальное давление:	16 bar
Размер входа:	DN150
Размер на выходе:	DN150
<b>Материал:</b>	
Корпус насоса:	литейный чугун
Рабочее колесо:	Чугун
Вал двигателя:	Нержавеющая сталь
Уплотнение:	Керамика-графит
<b>Температура окружающей среды:</b>	
Температура окружающей среды:	40°C
<b>Двигатель:</b>	
Номер фазы двигателя:	3
Степень защиты:	IP55
Класс изоляции:	F
Мощность двигателя:	22 kW
Скорость вращения:	2900 rpm
Частота питания:	50 Hz
Номинальное напряжение:	380 V
Номинальный ток:	42.2 A
<b>Тип и температура жидкости:</b>	
Транспортируемая жидкость:	Чистая вода
Высокотемпературный тип:	-40°C ~ 120°C
<b>Другие:</b>	
вес нетто:	354 Kg





Компания ZHEJIANG GRANDFAR PUMP INDUSTRY  
CO.,LTD.

Номер телефона: +86-576-89890098

Дата создания: 2026-06-04

Модель: GTD150-25-220/4





Компания ZHEJIANG GRANDFAR PUMP INDUSTRY CO.,LTD.

Номер телефона: +86-576-89890098

Дата создания: 2026-06-04

Модель: GTD150-25-220/4

GB/T 1804--п	GTD150-25-220/4		
Tolerance			
0.5-6	±0.1		
6-30	±0.2		
30-120	±0.3		
120-400	±0.5		
400-1000	±0.8		
1000-2000	±1.0		
2000-4000	±1.5		
4000-10000	±2.0		
10000-20000	±3.0		
20000-40000	±4.0		
40000-100000	±5.0		
100000-200000	±6.0		
200000-400000	±7.0		
400000-1000000	±8.0		
1000000-2000000	±9.0		
2000000-4000000	±10.0		
4000000-10000000	±11.0		
10000000-20000000	±12.0		
20000000-40000000	±13.0		
40000000-100000000	±14.0		
100000000-200000000	±15.0		
200000000-400000000	±16.0		
400000000-1000000000	±17.0		
1000000000-2000000000	±18.0		
2000000000-4000000000	±19.0		
4000000000-10000000000	±20.0		
10000000000-20000000000	±21.0		
20000000000-40000000000	±22.0		
40000000000-100000000000	±23.0		
100000000000-200000000000	±24.0		
200000000000-400000000000	±25.0		
400000000000-1000000000000	±26.0		
1000000000000-2000000000000	±27.0		
2000000000000-4000000000000	±28.0		
4000000000000-10000000000000	±29.0		
10000000000000-20000000000000	±30.0		
20000000000000-40000000000000	±31.0		
40000000000000-100000000000000	±32.0		
100000000000000-200000000000000	±33.0		
200000000000000-400000000000000	±34.0		
400000000000000-1000000000000000	±35.0		
1000000000000000-2000000000000000	±36.0		
2000000000000000-4000000000000000	±37.0		
4000000000000000-10000000000000000	±38.0		
10000000000000000-20000000000000000	±39.0		
20000000000000000-40000000000000000	±40.0		
40000000000000000-100000000000000000	±41.0		
100000000000000000-200000000000000000	±42.0		
200000000000000000-400000000000000000	±43.0		
400000000000000000-1000000000000000000	±44.0		
1000000000000000000-2000000000000000000	±45.0		
2000000000000000000-4000000000000000000	±46.0		
4000000000000000000-10000000000000000000	±47.0		
10000000000000000000-20000000000000000000	±48.0		
20000000000000000000-40000000000000000000	±49.0		
40000000000000000000-100000000000000000000	±50.0		
100000000000000000000-200000000000000000000	±51.0		
200000000000000000000-400000000000000000000	±52.0		
400000000000000000000-1000000000000000000000	±53.0		
1000000000000000000000-2000000000000000000000	±54.0		
2000000000000000000000-4000000000000000000000	±55.0		
4000000000000000000000-10000000000000000000000	±56.0		
10000000000000000000000-20000000000000000000000	±57.0		
20000000000000000000000-40000000000000000000000	±58.0		
40000000000000000000000-100000000000000000000000	±59.0		
100000000000000000000000-200000000000000000000000	±60.0		
200000000000000000000000-400000000000000000000000	±61.0		
400000000000000000000000-1000000000000000000000000	±62.0		
1000000000000000000000000-2000000000000000000000000	±63.0		
2000000000000000000000000-4000000000000000000000000	±64.0		
4000000000000000000000000-10000000000000000000000000	±65.0		
10000000000000000000000000-20000000000000000000000000	±66.0		
20000000000000000000000000-40000000000000000000000000	±67.0		
40000000000000000000000000-100000000000000000000000000	±68.0		
100000000000000000000000000-200000000000000000000000000	±69.0		
200000000000000000000000000-400000000000000000000000000	±70.0		
400000000000000000000000000-1000000000000000000000000000	±71.0		
1000000000000000000000000000-2000000000000000000000000000	±72.0		
2000000000000000000000000000-4000000000000000000000000000	±73.0		
4000000000000000000000000000-10000000000000000000000000000	±74.0		
10000000000000000000000000000-20000000000000000000000000000	±75.0		
20000000000000000000000000000-40000000000000000000000000000	±76.0		
40000000000000000000000000000-100000000000000000000000000000	±77.0		
100000000000000000000000000000-200000000000000000000000000000	±78.0		
200000000000000000000000000000-400000000000000000000000000000	±79.0		
400000000000000000000000000000-1000000000000000000000000000000	±80.0		
1000000000000000000000000000000-2000000000000000000000000000000	±81.0		
2000000000000000000000000000000-4000000000000000000000000000000	±82.0		
4000000000000000000000000000000-10000000000000000000000000000000	±83.0		
10000000000000000000000000000000-20000000000000000000000000000000	±84.0		
20000000000000000000000000000000-40000000000000000000000000000000	±85.0		
40000000000000000000000000000000-100000000000000000000000000000000	±86.0		
100000000000000000000000000000000-200000000000000000000000000000000	±87.0		
200000000000000000000000000000000-400000000000000000000000000000000	±88.0		
400000000000000000000000000000000-1000000000000000000000000000000000	±89.0		
1000000000000000000000000000000000-2000000000000000000000000000000000	±90.0		
2000000000000000000000000000000000-4000000000000000000000000000000000	±91.0		
4000000000000000000000000000000000-10000000000000000000000000000000000	±92.0		
10000000000000000000000000000000000-20000000000000000000000000000000000	±93.0		
20000000000000000000000000000000000-40000000000000000000000000000000000	±94.0		
40000000000000000000000000000000000-100000000000000000000000000000000000	±95.0		
100000000000000000000000000000000000-200000000000000000000000000000000000	±96.0		
200000000000000000000000000000000000-400000000000000000000000000000000000	±97.0		
400000000000000000000000000000000000-1000000000000000000000000000000000000	±98.0		
1000000000000000000000000000000000000-2000000000000000000000000000000000000	±99.0		
2000000000000000000000000000000000000-4000000000000000000000000000000000000	±100.0		

<p>GB/T 1184-H</p> <p>Surface finish</p> <table border="1"> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;0.1&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;0.2&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;0.3&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;0.5&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;1.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;2.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;3.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;4.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;5.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;6.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;8.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;10.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;12.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;15.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;20.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;25.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;32.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;40.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;50.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;63.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;80.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;100.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;125.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;160.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;200.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;250.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;315.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;400.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;500.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;630.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;800.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;1000.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;1250.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;1600.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;2000.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;2500.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;3150.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;4000.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;5000.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;6300.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;8000.0&lt;/math&gt;</td></tr> <tr><td>&lt;math&gt;R_a&lt;/math&gt;</td><td>&lt;math&gt;10000.0&lt;/math&gt;</td></tr> </table>	<math>R_a</math>	<math>0.1</math>	<math>R_a</math>	<math>0.2</math>	<math>R_a</math>	<math>0.3</math>	<math>R_a</math>	<math>0.5</math>	<math>R_a</math>	<math>1.0</math>	<math>R_a</math>	<math>2.0</math>	<math>R_a</math>	<math>3.0</math>	<math>R_a</math>	<math>4.0</math>	<math>R_a</math>	<math>5.0</math>	<math>R_a</math>	<math>6.0</math>	<math>R_a</math>	<math>8.0</math>	<math>R_a</math>	<math>10.0</math>	<math>R_a</math>	<math>12.0</math>	<math>R_a</math>	<math>15.0</math>	<math>R_a</math>	<math>20.0</math>	<math>R_a</math>	<math>25.0</math>	<math>R_a</math>	<math>32.0</math>	<math>R_a</math>	<math>40.0</math>	<math>R_a</math>	<math>50.0</math>	<math>R_a</math>	<math>63.0</math>	<math>R_a</math>	<math>80.0</math>	<math>R_a</math>	<math>100.0</math>	<math>R_a</math>	<math>125.0</math>	<math>R_a</math>	<math>160.0</math>	<math>R_a</math>	<math>200.0</math>	<math>R_a</math>	<math>250.0</math>	<math>R_a</math>	<math>315.0</math>	<math>R_a</math>	<math>400.0</math>	<math>R_a</math>	<math>500.0</math>	<math>R_a</math>	<math>630.0</math>	<math>R_a</math>	<math>800.0</math>	<math>R_a</math>	<math>1000.0</math>	<math>R_a</math>	<math>1250.0</math>	<math>R_a</math>	<math>1600.0</math>	<math>R_a</math>	<math>2000.0</math>	<math>R_a</math>	<math>2500.0</math>	<math>R_a</math>	<math>3150.0</math>	<math>R_a</math>	<math>4000.0</math>	<math>R_a</math>	<math>5000.0</math>	<math>R_a</math>	<math>6300.0</math>	<math>R_a</math>	<math>8000.0</math>	<math>R_a</math>	<math>10000.0</math>	<p>GTD150-25-220/4</p> <p>             B : 350mm              B1 : 355mm              B2 : 273mm              B3 : 238mm              B4 : 208mm              B5 : 230mm              H1 : 215mm              H2 : 269mm              H3 : 1099mm              L1 : 800mm              L2 : 400mm              D : 285mm         </p> <p>             D1 : 240mm              DN : 150mm              n : 8              d : 22mm              n×m : 2×M16         </p>
<math>R_a</math>	<math>0.1</math>																																																																																				
<math>R_a</math>	<math>0.2</math>																																																																																				
<math>R_a</math>	<math>0.3</math>																																																																																				
<math>R_a</math>	<math>0.5</math>																																																																																				
<math>R_a</math>	<math>1.0</math>																																																																																				
<math>R_a</math>	<math>2.0</math>																																																																																				
<math>R_a</math>	<math>3.0</math>																																																																																				
<math>R_a</math>	<math>4.0</math>																																																																																				
<math>R_a</math>	<math>5.0</math>																																																																																				
<math>R_a</math>	<math>6.0</math>																																																																																				
<math>R_a</math>	<math>8.0</math>																																																																																				
<math>R_a</math>	<math>10.0</math>																																																																																				
<math>R_a</math>	<math>12.0</math>																																																																																				
<math>R_a</math>	<math>15.0</math>																																																																																				
<math>R_a</math>	<math>20.0</math>																																																																																				
<math>R_a</math>	<math>25.0</math>																																																																																				
<math>R_a</math>	<math>32.0</math>																																																																																				
<math>R_a</math>	<math>40.0</math>																																																																																				
<math>R_a</math>	<math>50.0</math>																																																																																				
<math>R_a</math>	<math>63.0</math>																																																																																				
<math>R_a</math>	<math>80.0</math>																																																																																				
<math>R_a</math>	<math>100.0</math>																																																																																				
<math>R_a</math>	<math>125.0</math>																																																																																				
<math>R_a</math>	<math>160.0</math>																																																																																				
<math>R_a</math>	<math>200.0</math>																																																																																				
<math>R_a</math>	<math>250.0</math>																																																																																				
<math>R_a</math>	<math>315.0</math>																																																																																				
<math>R_a</math>	<math>400.0</math>																																																																																				
<math>R_a</math>	<math>500.0</math>																																																																																				
<math>R_a</math>	<math>630.0</math>																																																																																				
<math>R_a</math>	<math>800.0</math>																																																																																				
<math>R_a</math>	<math>1000.0</math>																																																																																				
<math>R_a</math>	<math>1250.0</math>																																																																																				
<math>R_a</math>	<math>1600.0</math>																																																																																				
<math>R_a</math>	<math>2000.0</math>																																																																																				
<math>R_a</math>	<math>2500.0</math>																																																																																				
<math>R_a</math>	<math>3150.0</math>																																																																																				
<math>R_a</math>	<math>4000.0</math>																																																																																				
<math>R_a</math>	<math>5000.0</math>																																																																																				
<math>R_a</math>	<math>6300.0</math>																																																																																				
<math>R_a</math>	<math>8000.0</math>																																																																																				
<math>R_a</math>	<math>10000.0</math>																																																																																				

<p>GRANDFAR</p>	<p>Dimension drawing</p> <p>GTD150-25-220/4</p>
-----------------	---

<p>Design: _____</p> <p>Drawn: _____</p> <p>Checked: _____</p> <p>Approved: _____</p> <p>Date: 2022.3.16</p>	<p>Code: _____</p> <p>Version: B</p> <p>View: _____</p> <p>Scale: 1:1</p>	<p>Weight: _____ kg</p> <p>Scale: _____</p>	<p>GTD150-25-220/4</p>
--	---	---	------------------------



Компания ZHEJIANG GRANDFAR PUMP INDUSTRY CO.,LTD.

Создано :

Номер телефона: +86-576-89890098:

Дата создания: 2026-06-04

Модель: GTD150-25-220/4

<b>GB/T 1804--п</b>	<b>Точность</b>	f7-f6	±0.1
		f6-f5	±0.2
		f5-f4	±0.3
		f4-f3	±0.5
		f3-f2	±0.8
		f2-f1	±1.2
		f1-f0	±2.0
		f0	±3.0
			±5.0
			±10.0
			±15.0
			±20.0
			±30.0
			±50.0
			±70.0
			±100.0
			±150.0
			±200.0
			±300.0
			±500.0
			±700.0
			±1000.0
			±1500.0
			±2000.0
			±3000.0
			±5000.0
			±7000.0
			±10000.0
			±15000.0
			±20000.0
			±30000.0
			±50000.0
			±70000.0
			±100000.0
			±150000.0
			±200000.0
			±300000.0
			±500000.0
			±700000.0
			±1000000.0
			±1500000.0
			±2000000.0
			±3000000.0
			±5000000.0
			±7000000.0
			±10000000.0
			±15000000.0
			±20000000.0
			±30000000.0
			±50000000.0
			±70000000.0
			±100000000.0
			±150000000.0
			±200000000.0
			±300000000.0
			±500000000.0
			±700000000.0
			±1000000000.0
			±1500000000.0
			±2000000000.0
			±3000000000.0
			±5000000000.0
			±7000000000.0
			±10000000000.0
			±15000000000.0
			±20000000000.0
			±30000000000.0
			±50000000000.0
			±70000000000.0
			±100000000000.0
			±150000000000.0
			±200000000000.0
			±300000000000.0
			±500000000000.0
			±700000000000.0
			±1000000000000.0
			±1500000000000.0
			±2000000000000.0
			±3000000000000.0
			±5000000000000.0
			±7000000000000.0
			±10000000000000.0
			±15000000000000.0
			±20000000000000.0
			±30000000000000.0
			±50000000000000.0
			±70000000000000.0
			±100000000000000.0
			±150000000000000.0
			±200000000000000.0
			±300000000000000.0
			±500000000000000.0
			±700000000000000.0
			±1000000000000000.0
			±1500000000000000.0
			±2000000000000000.0
			±3000000000000000.0
			±5000000000000000.0
			±7000000000000000.0
			±10000000000000000.0
			±15000000000000000.0
			±20000000000000000.0
			±30000000000000000.0
			±50000000000000000.0
			±70000000000000000.0
			±100000000000000000.0
			±150000000000000000.0
			±200000000000000000.0
			±300000000000000000.0
			±500000000000000000.0
			±700000000000000000.0
			±1000000000000000000.0
			±1500000000000000000.0
			±2000000000000000000.0
			±3000000000000000000.0
			±5000000000000000000.0
			±7000000000000000000.0
			±10000000000000000000.0
			±15000000000000000000.0
			±20000000000000000000.0
			±30000000000000000000.0
			±50000000000000000000.0
			±70000000000000000000.0
			±100000000000000000000.0
			±150000000000000000000.0
			±200000000000000000000.0
			±300000000000000000000.0
			±500000000000000000000.0
			±700000000000000000000.0
			±1000000000000000000000.0
			±1500000000000000000000.0
			±2000000000000000000000.0
			±3000000000000000000000.0
			±5000000000000000000000.0
			±7000000000000000000000.0
			±10000000000000000000000.0
			±15000000000000000000000.0
			±20000000000000000000000.0
			±30000000000000000000000.0
			±50000000000000000000000.0
			±70000000000000000000000.0
			±100000000000000000000000.0
			±150000000000000000000000.0
			±200000000000000000000000.0
			±300000000000000000000000.0
			±500000000000000000000000.0
			±700000000000000000000000.0
			±1000000000000000000000000.0
			±1500000000000000000000000.0
			±2000000000000000000000000.0
			±3000000000000000000000000.0
			±5000000000000000000000000.0
			±7000000000000000000000000.0
			±10000000000000000000000000.0
			±15000000000000000000000000.0
			±20000000000000000000000000.0
			±30000000000000000000000000.0
			±50000000000000000000000000.0
			±70000000000000000000000000.0
			±100000000000000000000000000.0
			±150000000000000000000000000.0
			±200000000000000000000000000.0
			±300000000000000000000000000.0
			±500000000000000000000000000.0
			±700000000000000000000000000.0
			±1000000000000000000000000000.0
			±1500000000000000000000000000.0
			±2000000000000000000000000000.0
			±3000000000000000000000000000.0
			±5000000000000000000000000000.0
			±7000000000000000000000000000.0
			±10000000000000000000000000000.0
			±15000000000000000000000000000.0
			±20000000000000000000000000000.0
			±30000000000000000000000000000.0
			±50000000000000000000000000000.0
			±70000000000000000000000000000.0
			±100000000000000000000000000000.0
			±150000000000000000000000000000.0
			±200000000000000000000000000000.0
			±300000000000000000000000000000.0
			±500000000000000000000000000000.0
			±700000000000000000000000000000.0
			±1000000000000000000000000000000.0
			±1500000000000000000000000000000.0
			±2000000000000000000000000000000.0
			±3000000000000000000000000000000.0
			±5000000000000000000000000000000.0
			±7000000000000000000000000000000.0
			±10000000000000000000000000000000.0
			±15000000000000000000000000000000.0
			±20000000000000000000000000000000.0
			±30000000000000000000000000000000.0
			±50000000000000000000000000000000.0
			±70000000000000000000000000000000.0
			±100000000000000000000000000000000.0
			±150000000000000000000000000000000.0
			±200000000000000000000000000000000.0
			±300000000000000000000000000000000.0
			±500000000000000000000000000000000.0
			±700000000000000000000000000000000.0
			±1000000000000000000000000000000000.0
			±1500000000000000000000000000000000.0
			±2000000000000000000000000000000000.0
			±3000000000000000000000000000000000.0
			±5000000000000000000000000000000000.0
			±7000000000000000000000000000000000.0
			±10000000000000000000000000000000000.0
			±15000000000000000000000000000000000.0
			±20000000000000000000000000000000000.0
			±30000000000000000000000000000000000.0
			±50000000000000000000000000000000000.0
			±70000000000000000000000000000000000.0
			±100000000000000000000000000000000000.0
			±150000000000000000000000000000000000.0
			±200000000000000000000000000000000000.0
			±300000000000000000000000000000000000.0
			±500000000000000000000000000000000000.0
			±700000000000000000000000000000000000.0
			±1000000000000000000000000000000000000.0
			±1500000000000000000000000000000000000.0
			±2000000000000000000000000000000000000.0
			±3000000000000000000000000000000000000.0
			±5000000000000000000000000000000000000.0
			±7000000000000000000000000000000000000.0
			±10000000000000000000000000000000000000.0
			±15000000000000000000000000000000000000.0
			±20000000000000000000000000000000000000.0
			±30000000000000000000000000000000000000.0
			±50000000000000000000000000000000000000.0
			±70000000000000000000000000000000000000.0
			±100000000000000000000000000000000000000.0
			±150000000000000000000000000000000000000.0
			±200000000000000000000000000000000000000.0
			±300000000000000000000000000000000000000.0