

English Instruction

for ZYC120B-B Pile Driving Machine

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□, 2 Specifications

1KN = 101 kgf.
600KN = 60600 kgf.
60600 kgf = 60600 × 9.8 = 593880 N

2.1. Capacity of Pile Driving

2.1.1 When two principle pile driving cylinder are working

2.1.1a At the fast speed position with center piling

Maximum pile driving force

600KN

Speed of pile driving

6.3m/min

2.1.1b At the normal speed position

Maximum pile driving force

1200KN

Max speed of pile driving

3m/min

2.1.2 Depth of pile driving

Maximum depth of each pile driving

1.6m

2.1.1c At the side piling

Maximum pile driving force

500KN

Max speed of pile driving

16m/min

Max depth of each pile driving

1m

2.2. Moving Capacity

Distance of each movement: longitudinal

1.5m

horizontal

0.4m

each turning angle:

15°

speed of moving:

forward

9m/min

backward

15m/min

left

9m/min

right

15m/min

2.3. Distance of Ascending and Descending

1.45m

2.4. Size of Piles

2.4.1 For center piling:

pipe pile:

maximum

ø300mm

square pile:

maximum

□350mm

length of single pile:

a)

≥1.5 m, ≤8 m (middle pile)

2.4.2 For side piling

pipe pile:

maximum

ø250mm

square pile:

maximum

□250mm

length of single pile

b)

≥1.5 m, ≤7m (side pile)

2.5. Hydraulic System

rated pressure: 24(18) MPa

rated flow: 171(93) L/min

Note: the number outside the brackets for the main engine and the number in the brackets for the crane.

2.6. Electrical System

rated horsepower: 18.5X2+22=59kw

rated voltage: 380 V

rated current: 35X2+42=112A

frequency: 50 Hz

input cable: YCW-3×50+1×10

2.7. Weight

total weight: 120t

heaviest component: 21t

2.8. Dimensions when Working

For center pile driving: length × width × height = 6.3m × 4m × 13m

For side pile driving: length × width × height = 7.3m × 4m × 11m

2.9. Side distance 0.75m

Corner distance 1.2m

2.10. Pressure on Land:

long boat: 95KN/m²

short boat: 114KN/m²

2.11. Crane

maximum lifting weight: 8T

maximum speed of ascending: 11m/min

maximum rotating speed: 3 r/min

Relation between Ascending Angle and the Allowed Lifting Weight

Ascending Angle (degree)	Lifting Weight (t)	Rotating Radius (m)
0	1.4	14
15	3.0	13
30	3.5	12
45	5.0	9
60	7.0	7
75	8.0	4

Note: Be sure to operate the machine as stated in the above form and not to change at will

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the adjusted pressure of the relief valve for angle changing. (Here the angle refers to the angle of lifting arm of the crane to the land)