

# Mud pump Performance Parameters

## Performance Parameters:

There are two main parameters to measure the performance of a mud pump: Displacement and Pressure.

### Displacement:

Displacement is calculated as discharged liters per minute, it is related with the drilling hole diameter and the return speed of drilling fluid from the bottom of the hole, i.e. the larger the diameter of drilling hole, the larger the desired displacement. The return speed of drilling fluid should reach the requirement that can wash away the debris and rock powder cut by the drill from the bottom of the hole in a timely manner, and reliably carry them to the earth surface. When drilling geological core, the speed is generally in range of 0.4 to 1.0 m<sup>3</sup>/min.

### Pressure:

The pressure size of the pump depends on the depth of the drilling hole, the resistance of flushing fluid (drilling fluid) through the channel, as well as the nature of the conveying drilling fluid. The deeper the drilling hole and the greater the pipeline resistance, the higher the pressure needed.

With the changes of drilling hole diameter and depth, it requires that the displacement of the pump can be adjusted accordingly. In the mud pump mechanism, the gearbox or hydraulic motor is equipped to adjust its speed and displacement. In order to accurately grasp the changes in pressure and displacement, a flow meter and pressure gauge are installed in the mud pump.

IB-1330	ZB-22000	IB-672
IB-1334	ZT-16125	IB-670
IB-1332	ZT-15000	IB-680
IB-657	ZT-14500	IB-676
IB-675	ZT-13127	IB-671
IB-672	ZT-11812	IB-678
IB-670	ZT-10003	IB-677
IB-680	7602-0201-67	12BA4
IB-676	7602-0201-37	12GF36
IB-671	7602-0201-38	12GF38
IB-677	7602-0201-47	12GF20
12BA4	7602-0200-54	12BA6
65-725-936	7602-0200-53	12W84
bearing(original)		
65-725-936	7602-0213-06	12W85
65-725-959	7602-0212-68	12BA18
65-725-960	7602-0212-69	12BA5
65-725-000	6319-0078-00	12AM3
65-725-010	7602-0212-89	12BA44
IB-1331	6310-0012-00	12BA19
IB-1330	7602-0213-07	12W73

IB-1334	7602-0212-67	12W60
IB-1332	7602-0212-88	12W58
IB-657	7602-0211-09	12W75
IB-675	7602-0210-37	12AM3 bearing(original)
IB-672	ZB-6292 bearing(original)	IB-1332
IB-670	ZB-6292	IB-657
IB-680	ZB-32000	IB-675
IB-676	ZB-28515	IB-672
IB-671	ZB-26250	IB-670
IB-677	ZB-25500	IB-680
12BA4	ZB-23500	IB-676
12GF36	ZB-22000	IB-671
12GF38	ZT-16125	IB-678
12GF20	ZT-15000	IB-677
12BA6	ZT-14500	12BA4
12W84	ZT-13127	12GF36
12W85	ZT-11812	12GF38
12BA18	ZT-10003	12GF20
65-725-957	7602-0201-67	12BA6
bearing(original)		
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65-725-936	7602-0201-38	12W85
65-725-959	7602-0201-47	12BA18
65-725-960	7602-0200-54	12BA5
65-725-000	7602-0200-53	12AM3
65-725-010	7602-0213-06	12BA5 bearing(original)
IB-1331	7602-0212-68	IB-1332
IB-1330	7602-0212-69	IB-657
IB-1334	6319-0078-00	IB-675
IB-1332	7602-0212-89	IB-672
IB-657	ZB-7873 bearing(original)	IB-670
IB-675	ZB-7873	IB-680
IB-672	ZB-7081	IB-676
IB-670	ZB-6292	IB-671
IB-680	ZB-32000	IB-678
IB-676	ZB-28515	IB-677
IB-671	ZB-26250	12BA4
IB-677	ZB-25500	12GF36
12BA4	ZB-23500	12GF38
12GF36	ZB-22000	12GF20
65-725-957	ZT-16125	12BA6
65-725-957	ZT-15000	12W84
65-725-936	ZT-14500	12W85
65-725-959	ZT-13127	12BA18
65-725-960	ZT-11812	12BA5
65-725-000	ZT-10003	12AM3

65-725-010	7602-0201-67	12BA44	
IB-1331	7602-0201-37	12BA19	
IB-1330	7602-0201-38	12W73	
IB-1334	7602-0201-47		12BA5
IB-1332	7602-0200-54	IB-1332	
IB-657	7602-0200-53	IB-657	
IB-675	7602-0213-06	IB-675	
IB-672	7602-0212-68	IB-672	
IB-670	7602-0212-69	IB-670	
IB-680	ZB-11028 )	IB-680	
IB-676	ZB-11028	IB-676	
IB-671	ZB-10236	IB-671	
IB-677	ZB-8662	IB-678	
12BA4	ZB-7873	IB-677	
12GF36	ZB-7081	12BA4	
65-725-080	ZB-6292	12GF36	
bearing(original)			
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65-725-020	ZB-28515	12GF20	
65-725-957	ZB-26250	12BA6	
65-725-936	ZB-25500	12W84	
65-725-959	ZB-23500	12W85	
65-725-960	ZB-22000	12BA18	
65-725-000	ZT-16125	12BA5	
65-725-010	ZT-15000	12AM3	
IB-1331	ZT-14500	12BA44	
IB-1330	ZT-13127	12BA19	
IB-1334	ZT-11812	12W73	
IB-1332	ZT-10003		12BA18
IB-657	7602-0201-67	IB-1331	
IB-675	7602-0201-37	IB-1330	
IB-672	7602-0201-38	IB-1334	
IB-670	7602-0201-47	IB-1332	
IB-680	7602-0200-54	IB-657	
IB-676	7602-0200-53	IB-675	
IB-671	7602-0213-06	IB-672	
IB-677	7602-0212-68	IB-670	
12BA4	7602-0212-69	IB-680	
7602-0211-09	6319-0078-00	IB-676	
bearing(original)			
7602-0211-09	7602-0212-89	IB-671	
7602-0210-37	6310-0012-00	IB-678	
7602-0213-05	7602-0213-07	IB-677	
6301-0038-00	7602-0212-67	12BA4	
6397-0267-00	ZB-6751	12GF36	
7602-0212-90	ZB-9005	12GF38	

7602-0212-91	ZB-8253	12GF20
65-725-034	ZB-7370	12BA6
65-725-080	ZB-7120	12W84
65-725-020	ZB-6751	12W85
65-725-957	ZB-5620	65-725-000
65-725-936	ZB-11028	7602-0201-47
65-725-959	ZB-10236	7602-0201-47
65-725-960	ZB-8662	7602-0200-54
65-725-000	ZB-7873	7602-0200-53
65-725-010	ZB-7081	7602-0213-06
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IB-1330	ZB-32000	7602-0212-69
IB-1334	ZB-28515	6319-0078-00
IB-1332	ZB-26250	7602-0212-89
IB-657	ZB-25500	6310-0012-00
IB-675	ZB-23500	7602-0213-07
IB-672	ZB-22000	7602-0212-67
IB-670	ZT-16125	7602-0212-88
IB-680	ZT-15000	7602-0211-09
IB-676	ZT-14500	7602-0210-37
IB-671	ZT-13127	7602-0213-05
6310-0012-00	ZT-11812	6301-0038-00
bearing(original)		
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7602-0212-67	7602-0201-37	7602-0212-91
7602-0212-88	7602-0201-38	65-725-034
7602-0211-09	7602-0201-47	65-725-080
7602-0210-37	7602-0200-54	65-725-020
7602-0213-05	7602-0200-53	65-725-957
6301-0038-00	7602-0213-06	65-725-936
6397-0267-00	7602-0212-68	65-725-959
7602-0212-90	7602-0212-69	65-725-960
7602-0212-91	6319-0078-00	65-725-000
65-725-034	7602-0212-89	65-725-010
65-725-080	6310-0012-00	7602-0201-38
65-725-020	7602-0213-07	7602-0201-38
65-725-957	7602-0213-06	7602-0201-47
65-725-936	7602-0212-88	7602-0200-54
65-725-959	7602-0211-09	7602-0200-53
65-725-960	7602-0210-37	7602-0213-06
65-725-000	7602-0213-05	7602-0212-68
65-725-010	6301-0038-00	7602-0212-69
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IB-1330	7602-0212-90	7602-0212-89
IB-1334	7602-0212-91	6310-0012-00

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IB-675	65-725-020	7602-0212-88
IB-672	65-725-957	7602-0211-09
IB-670	65-725-936	7602-0210-37
IB-680	65-725-959	7602-0213-05
IB-676	65-725-960	6301-0038-00
IB-671	65-725-000	6397-0267-00
IB-677	65-725-010	7602-0212-90
12BA4	IB-1331	7602-0212-91
12GF36	IB-1330	65-725-034
12GF38	IB-1334	ADA42201
12GF20	IB-1332	AD5238X
12BA6	IB-657	AD4814D
12W84	IB-675	AD5148
12W85	IB-672	MUC5136
12BA18	IB-670	E-5140-UMR
6319-0078-00	IB-680	MUC5144
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6310-0012-00	IB-678	MUC5136
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7602-0210-37	12GF20	ZT-8004
7602-0213-05	12BA6	ZT-7006
6301-0038-00	12W84	7602-0220-62
6397-0267-00	F500	7602-0220-61
7602-0212-90	4G32828H	7602-0202-01
7602-0212-91	3G3053738H	22-030-007
65-725-034	92984QU	IB-666
65-725-080	5G354920Q	IB-429
65-725-020		4600170/649366
65-725-957	12W58 bearing(original)	4600169/649472
65-725-936	544759	ZA-6870
65-725-959	510616A	7602-0210-67
65-725-960	10-6040	7602-0212-98
65-725-000	544979	7602-0210-93/94
6319-0078-00	546293	7602-0210-95/96
bearing(original)		
6319-0078-00	10-6040	65-101-775
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7602-0213-07	10-6209	IB-666/491-35

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IB-306/3693B  
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65-725-020  
65-725-957  
65-725-936