

Readings of pump with single suction line of 150mm

Pump-1

Discharge valve status	Dicharge pressure (psi)	Suction pressure - inHg(psi)	Dicharge flow rate (m3/5 min)	Dicharge flow rate (l/s)	Average flow (l/s)	TDH (m)
fully open	10	(-)7.5(-3.68)	7.45	24.83	24.8	11.29
	10	(-)7.5(-3.68)	7.4	24.67		
	10	(-)7.5(-3.68)	7.47	24.90		
75% open	11.6	(-)6.5(-3.19)	6.96	23.20	23.20	12.16
	11.6	(-)7(-3.44)	6.96	23.20		
50% open	15	(-)6(-2.95)	6.16	20.53	20.45	14.37
	15	(-)6.5(-3.07)	6.11	20.37		
33.33% open	20	(-)5(-2.46)	5.09	16.97	16.93	17.43
	19	(-)5(-2.46)	5.07	16.90		
0% open	25	(-)1(-0.49)	0	0.00	0.00	18.77

*. 1 inch Mercury=0.4912 psi

**. The Elevation difference between the Suction and Discharge pressure gauges of 0.85m shall be added in TDH

***. Velocity head also added to TDH

Pump-2

Discharge valve status	Dicharge pressure (psi)	Suction pressure (in Hg)	Dicharge flow rate (m3/5 min)	Dicharge flow rate (l/s)
fully open	10	-7	7.38	24.60
	10	-8	7.36	24.53
	10	-7.5	7.36	24.53
75% open	10	-6	7	23.33
50% open	15	-5	6.11	20.37
0% open	25	-1	0	0.00

Readings of pump with 8 suction line of 100mm
Pump-1 (Previous test-Apr-2016)

Discharge valve status	Dicharge pressure (m)	Suction pressure (m)	TDH (m)	Dicharge flow rate (l/s)
fully open	5.1	-2.84	9.61	21.30
50% open	8.16	-2.65	12.48	19.10
30% open	12.24	-2.65	16.56	12.40
0% open	18.4	0	19.25	0.00

Manufacturer pump data, from the pump curve

Head(m)	18.8	18.6	18.2	17.2	15.5	13.4	11.1	9.3
Flow (l/s)	0	20	25	30	35	40	45	48

