

2. Stability of flow rate under changing conditions.

The following are data measured by changing flow rates and discharge pressures with water. The pump speed varies from 1 to 90r.p.m. and the discharge pressure changed from 0.5 to 4MPa.

However, the difference in volumetric efficiencies (actual flow-rate \div theoretical flow-rate) is within 2%. Please see the discharge lines.

It is obvious that the revolution and the flow-rate are proportional under the same discharge pressure. Data will vary dependant on the model.

■ Data 2

□ Model : HYSB-40 □ Liquid : Water

NO.	Liquid Temp. (°C)	Discharge Pressure (MPa)	Pump Speed (rpm)	Weight (g)	Hours (minute)	Specific Gravity	Discharge Quantity (ml)	Theoretical Volume (ml)	Volumetric Efficiency (%)
1	14	0.5	1.00	1301.94	10	1.0000	1301.94	1319.4690	98.67
2	14	2.0	1.00	1287.48	10	1.0000	1287.48	1319.4690	97.58
3	14	4.0	1.00	1280.18	10	1.0000	1280.18	1319.4690	97.02
4	14	0.5	10.00	13023.20	10	1.0000	13023.20	13194.6900	98.70
5	14	2.0	10.00	12910.90	10	1.0000	12910.90	13194.6900	97.85
6	14	4.0	10.00	12857.20	10	1.0000	12857.20	13194.6900	97.44
7	14	0.5	45.00	58645.35	10	1.0000	58645.35	59376.1050	98.77
8	14	2.0	45.00	58169.70	10	1.0000	58169.70	59376.1050	97.97
9	14	4.0	45.00	57992.40	10	1.0000	57992.40	59376.1050	97.67
10	14	0.5	90.00	117540.00	10	1.0000	117540.00	118752.2100	98.98
11	14	2.0	90.00	116708.40	10	1.0000	116708.40	118752.2100	98.28
12	14	4.0	90.00	116231.40	10	1.0000	116231.40	118752.2100	97.88

■ Discharge Line

