**LAB9**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Data No | Q, Volumetric flow rate (m3 /h) | Element names | Measured pressure losses (PL) (mbar) | Measured head losses (hL) (m) | Total head loss (hL,tot) (m) MEASURED | V, Velocity (m/s) | Reynolds number | Total head loss (hL,tot) (m) CALCULATED | K, Head loss coefficient CALCULATED |
| 1 | 2.5 | Element 1: 45° elbow | 0.018 | 0.00183 | 0.02419 m |  |  |  |  |
| Element 2: 45° elbow | 0.024 | 0.00245 |
| Element 3: T-fastener | 0.046 | 0.00470 |
| Element 4: 90° elbow | 0.080 | 0.00817 |
| Element 5: 90° elbow | 0.069 | 0.00704 |

**LAB10**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **SELECT SPEAR VALVE OPENING: MIN MAX** | | | | | | | |
| **Data No** | **N,Rotational Speed, (rev/min)** | **Temperature (°C)** | **P, Pressure**  **(bar)** | **Q, Volumetric flow rate (m3 /h)** | **Moment, M (N-cm)** | **I, Current (A)** | **V, Voltage**  **(V)** |
| 1 | 540 | 21.97 | 0.47 | 16 m^3/h | 15.9 | 1.08 | 7.25 |
| 2 | 480 | 22.08 | 0.40 | 15 m^3/h | 7.2 | 1.01 | 6.33 |
| 3 | 390 | 22.21 | 0.37 | 14 m^3/h | 4.2 | 0.78 | 5.21 |