

Saturated Steam Mass Flow Table

Flow range (t/h)

| Nominal Diameter | 0.1 MPa | | 0.2 MPa | | 0.3 MPa | | 0.4 MPa | | 0.5 MPa | | 0.6 MPa | |
|------------------|------------------------|-------|------------------------|-------|------------------------|-------|------------------------|-------|------------------------|-------|------------------------|-------|
| DN25 | 9.3kg/h ~ 88.1kg/h | | 11.2kg/h ~ 128.8 kg/h | | 12.9kg/h ~ 168.8 kg/h | | 14.3 kg/h ~ 208.2 kg/h | | 15.6 kg/h ~ 247.3 kg/h | | 16.8 kg/h ~ 286.1 kg/h | |
| DN32 | 15.2 kg/h ~ 144.4 kg/h | | 18.4 kg/h ~ 211.1 kg/h | | 21.1 kg/h ~ 276.6 kg/h | | 23.4 kg/h ~ 341.2 kg/h | | 25.5 kg/h ~ 405.1 kg/h | | 27.5 kg/h ~ 468.8 kg/h | |
| DN40 | 23.8 kg/h ~ 225.7 kg/h | | 28.8 kg/h ~ 329.8 kg/h | | 32.9 kg/h ~ 432.2 kg/h | | 36.6 kg/h ~ 533.1 kg/h | | 39.9 kg/h ~ 633.0 kg/h | | 42.9 kg/h ~ 732.5 kg/h | |
| DN 50 | 0.04 | 0.35 | 0.04 | 0.52 | 0.05 | 0.68 | 0.06 | 0.83 | 0.06 | 0.99 | 0.07 | 1.14 |
| DN 65 | 0.06 | 0.60 | 0.08 | 0.87 | 0.09 | 1.14 | 0.10 | 1.41 | 0.11 | 1.67 | 0.11 | 1.93 |
| DN 80 | 0.1 | 0.90 | 0.12 | 1.32 | 0.13 | 1.73 | 0.15 | 2.13 | 0.16 | 2.53 | 0.17 | 2.93 |
| DN 100 | 0.15 | 1.41 | 0.18 | 2.06 | 0.21 | 2.7 | 0.23 | 3.33 | 0.25 | 3.96 | 0.27 | 4.58 |
| DN 125 | 0.23 | 2.20 | 0.28 | 3.22 | 0.32 | 4.22 | 0.36 | 5.21 | 0.39 | 6.18 | 0.42 | 7.15 |
| DN 150 | 0.33 | 3.17 | 0.40 | 4.64 | 0.46 | 6.08 | 0.51 | 7.5 | 0.56 | 8.9 | 0.60 | 10.30 |
| DN 200 | 0.60 | 5.64 | 0.72 | 8.25 | 0.82 | 10.8 | 0.91 | 13.33 | 1.00 | 15.83 | 1.07 | 18.31 |
| DN 250 | 0.93 | 8.81 | 1.12 | 12.88 | 1.29 | 16.88 | 1.43 | 20.82 | 1.56 | 24.73 | 1.68 | 28.61 |
| DN 300 | 1.34 | 12.69 | 1.62 | 18.55 | 1.85 | 24.31 | 2.06 | 29.99 | 2.24 | 35.61 | 2.41 | 41.20 |
| DN 350 | 1.82 | 17.28 | 2.20 | 25.25 | 2.52 | 33.09 | 2.80 | 40.82 | 3.05 | 48.46 | 3.28 | 56.08 |
| DN 400 | 2.38 | 22.57 | 2.88 | 32.98 | 3.29 | 43.22 | 3.66 | 53.31 | 3.99 | 63.3 | 4.29 | 73.25 |
| DN 450 | 3.01 | 28.56 | 3.64 | 41.74 | 4.17 | 54.70 | 4.63 | 67.47 | 5.05 | 80.11 | 5.43 | 92.71 |
| DN 500 | 3.7 | 35.3 | 4.5 | 51.5 | 5.1 | 67.5 | 5.70 | 83.3 | 6.2 | 98.9 | 6.7 | 114.5 |

Saturated Steam Mass Flow Table Continued

| 口径 (mm) | 0.7 MPa | | 0.8 MPa | | 0.9 MPa | | 1.0 MPa | | 1.1 MPa | |
|---------|------------------------|-------|------------------------|-------|------------------------|--------|------------------------|-------|------------------------|-------|
| DN25 | 17.8 kg/h ~ 322.5 kg/h | | 18.9 kg/h ~ 363.1 kg/h | | 19.8 kg/h ~ 401.5 kg/h | | 20.8 kg/h ~ 439.6 kg/h | | 21.7 kg/h ~ 477.9 kg/h | |
| DN32 | 29.1 kg/h ~ 528.4 kg/h | | 30.9 kg/h ~ 594.9 kg/h | | 32.5 kg/h ~ 657.8 kg/h | | 34.0 kg/h ~ 720.3 kg/h | | 35.5 kg/h ~ 783.0 kg/h | |
| DN40 | 0.05 | 0.83 | 0.05 | 0.93 | 0.05 | 1.03 | 0.05 | 1.13 | 0.06 | 1.22 |
| DN 50 | 0.07 | 1.29 | 0.08 | 1.45 | 0.08 | 1.61 | 0.08 | 1.76 | 0.09 | 1.91 |
| DN 65 | 0.12 | 2.18 | 0.13 | 2.45 | 0.13 | 2.71 | 0.14 | 2.97 | 0.15 | 3.23 |
| DN 80 | 0.18 | 3.30 | 0.19 | 3.72 | 0.2 | 4.11 | 0.21 | 4.5 | 0.22 | 4.89 |
| DN 100 | 0.28 | 5.16 | 0.30 | 5.81 | 0.32 | 6.42 | 0.33 | 7.0 | 0.35 | 7.65 |
| DN 125 | 0.44 | 8.06 | 0.47 | 9.08 | 0.5 | 10.04 | 0.52 | 11 | 0.54 | 11.95 |
| DN 150 | 0.64 | 11.61 | 0.68 | 13.07 | 0.71 | 14.45 | 0.75 | 15.83 | 0.78 | 17.21 |
| DN 200 | 1.14 | 20.64 | 1.21 | 23.24 | 1.27 | 25.69 | 1.33 | 28.14 | 1.39 | 30.6 |
| DN 250 | 1.78 | 32.25 | 1.89 | 36.31 | 1.98 | 40.15 | 2.1 | 44 | 2.2 | 47.8 |
| DN 300 | 2.56 | 46.45 | 2.72 | 52.28 | 2.86 | 57.81 | 3.0 | 63.3 | 3.12 | 68.8 |
| DN 350 | 3.49 | 63.22 | 3.70 | 71.16 | 3.9 | 78.69 | 4.1 | 86.16 | 4.24 | 93.7 |
| DN 400 | 4.55 | 82.57 | 4.83 | 92.95 | 5.1 | 102.77 | 5.3 | 112.5 | 5.54 | 122.3 |
| DN 450 | 5.8 | 104.5 | 6.1 | 117.6 | 6.43 | 130.1 | 6.72 | 142.4 | 7.02 | 154.8 |
| DN 500 | 7.1 | 129.0 | 7.5 | 145.2 | 7.94 | 160.6 | 8.31 | 175.8 | 8.67 | 191.2 |

Saturated Steam Mass Flow Table Continued 2

| Nominal Dimater | 1.2 MPa | | 1.3 MPa | | 1.4 MPa | | 1.5 MPa | | 1.6 MPa | |
|-----------------|--------------------|-------|---------------------|-------|---------------------|-------|---------------------|-------|---------------------|-------|
| DN25 | 22.5 kg/h~516.kg/h | | 23.3 kg/h~554.3kg/h | | 24.1 kg/h~592.3kg/h | | 24.9 kg/h~630.3kg/h | | 25.6 kg/h~668.4kg/h | |
| DN32 | 0.04 | 0.85 | 0.04 | 0.91 | 0.04 | 0.97 | 0.04 | 1.03 | 0.04 | 1.10 |
| DN40 | 0.06 | 1.32 | 0.06 | 1.42 | 0.06 | 1.52 | 0.06 | 1.61 | 0.07 | 1.71 |
| DN 50 | 0.09 | 2.06 | 0.09 | 2.22 | 0.10 | 2.37 | 0.10 | 2.52 | 0.10 | 2.67 |
| DN 65 | 0.15 | 3.49 | 0.16 | 3.75 | 0.16 | 4.00 | 0.17 | 4.26 | 0.17 | 4.52 |
| DN 80 | 0.23 | 5.28 | 0.24 | 5.68 | 0.25 | 6.07 | 0.25 | 6.45 | 0.26 | 6.84 |
| DN 100 | 0.36 | 8.26 | 0.37 | 8.87 | 0.39 | 9.48 | 0.40 | 10.08 | 0.41 | 10.69 |
| DN 125 | 0.56 | 12.9 | 0.58 | 13.86 | 0.60 | 14.81 | 0.62 | 15.76 | 0.64 | 16.71 |
| DN 150 | 0.81 | 18.58 | 0.84 | 19.95 | 0.87 | 21.32 | 0.90 | 22.69 | 0.92 | 24.06 |
| DN 200 | 1.44 | 33.03 | 1.49 | 35.48 | 1.54 | 37.91 | 1.59 | 40.34 | 1.64 | 42.78 |
| DN 250 | 2.25 | 51.61 | 2.33 | 55.43 | 2.41 | 59.23 | 2.49 | 63.03 | 2.56 | 66.84 |
| DN 300 | 3.24 | 74.31 | 3.36 | 79.82 | 3.47 | 85.29 | 3.58 | 90.76 | 3.69 | 96.25 |
| DN 350 | 4.4 | 101.2 | 4.6 | 108.6 | 4.7 | 116.1 | 4.9 | 123.5 | 5.0 | 131.0 |
| DN 400 | 5.8 | 132.1 | 6.0 | 141.9 | 6.2 | 151.6 | 6.4 | 161.4 | 6.6 | 171.1 |
| DN 450 | 7.3 | 167.2 | 7.6 | 179.6 | 7.8 | 191.9 | 8.1 | 204.2 | 8.3 | 216.6 |
| DN 500 | 9.0 | 206.4 | 9.3 | 221.7 | 9.6 | 236.9 | 9.9 | 252.1 | 10.2 | 267.4 |

Note: In the above table, the pressure is gauge pressure.

Overheated Steam Mass Flow Range

Flow range (t/h)

| Nominal Diameter (mm) | Min Flow (t/h) | Max Flow (t/h) |
|-----------------------|-------------------------|--------------------|
| DN25 | $8.82\sqrt{\rho}$ kg/h | 79.48ρ kg/h |
| DN32 | $14.4\sqrt{\rho}$ kg/h | 130.22ρ kg/h |
| DN40 | $22.62\sqrt{\rho}$ kg/h | 203.47ρ kg/h |
| DN 50 | $35.34\sqrt{\rho}$ kg/h | 317.93ρ kg/h |
| DN 65 | $59.7\sqrt{\rho}$ kg/h | 537.29ρ kg/h |
| DN 80 | $90.6\sqrt{\rho}$ kg/h | 813.89ρ kg/h |
| DN 100 | $0.14\sqrt{\rho}$ | 1.27ρ |
| DN 125 | $0.22\sqrt{\rho}$ | 2.0ρ |
| DN 150 | $0.31\sqrt{\rho}$ | 2.86ρ |
| DN 200 | $0.56\sqrt{\rho}$ | 5.07ρ |
| DN 250 | $0.88\sqrt{\rho}$ | 7.95ρ |
| DN 300 | $1.27\sqrt{\rho}$ | 11.45ρ |
| DN 350 | $1.73\sqrt{\rho}$ | 15.58ρ |
| DN 400 | $2.26\sqrt{\rho}$ | 20.35ρ |
| DN 450 | $2.86\sqrt{\rho}$ | 25.75ρ |
| DN 500 | $3.53\sqrt{\rho}$ | 31.79ρ |

Note: ρ ---Overheated steam density in Working condition, (kg/m³)